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AMIGA FORMAT

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1989-2000

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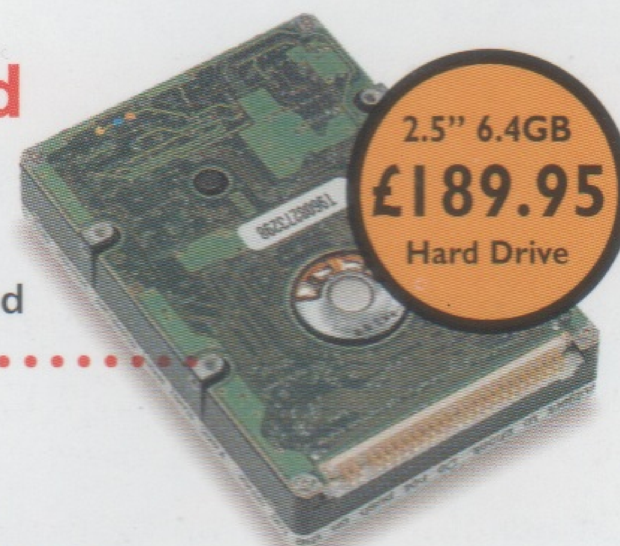
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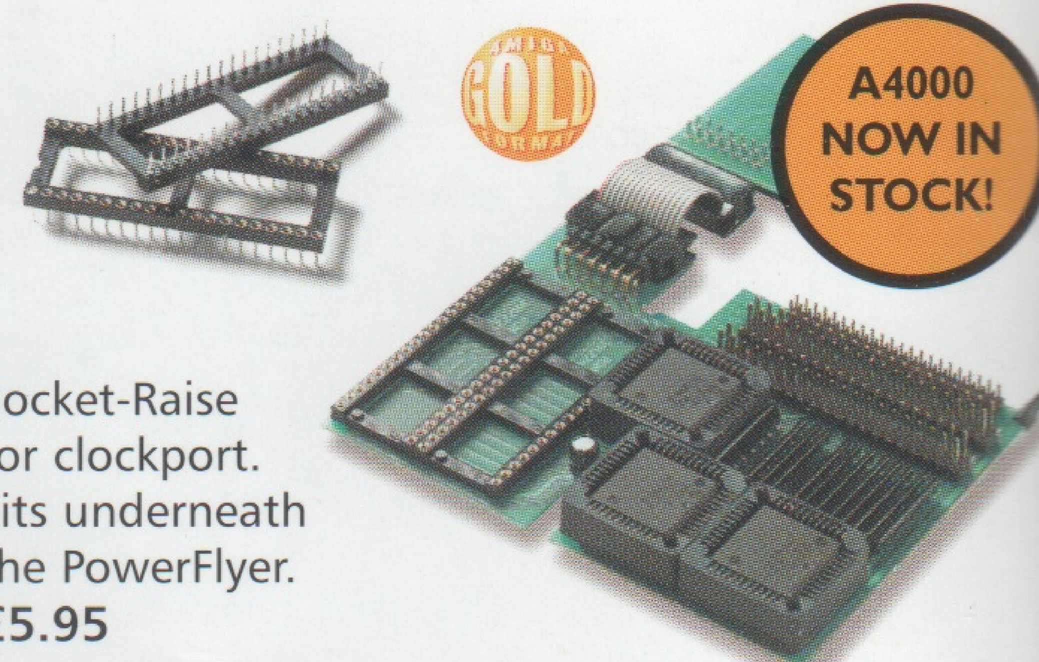
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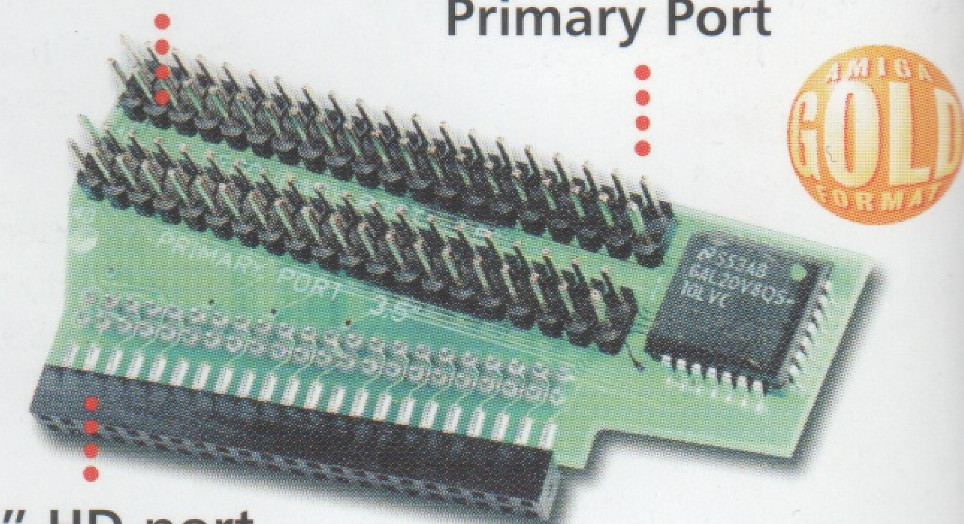
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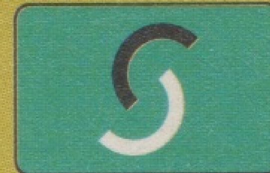
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As above but with 32MB RAM, Zorro 4 Card, Video Enabler for Z4, Cybervision, 15" SVGA Monitor, Ext. Audio & Speakers — £939.95

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New tower case for the A4000 includes: 7-slot Zorro II/III bus board, 2 video slots, 5 PC-ISA slots, 230 watt PSU, 3 x 5.25" external bays, 2 x 3.5" external bays and 6 x 3.5" internal bays — £189.95

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SCSI converter - 50 pin female Centronic to 50 pin header (for internal connection of SCSI device to Squirrel or similar interfaces)	£9.95
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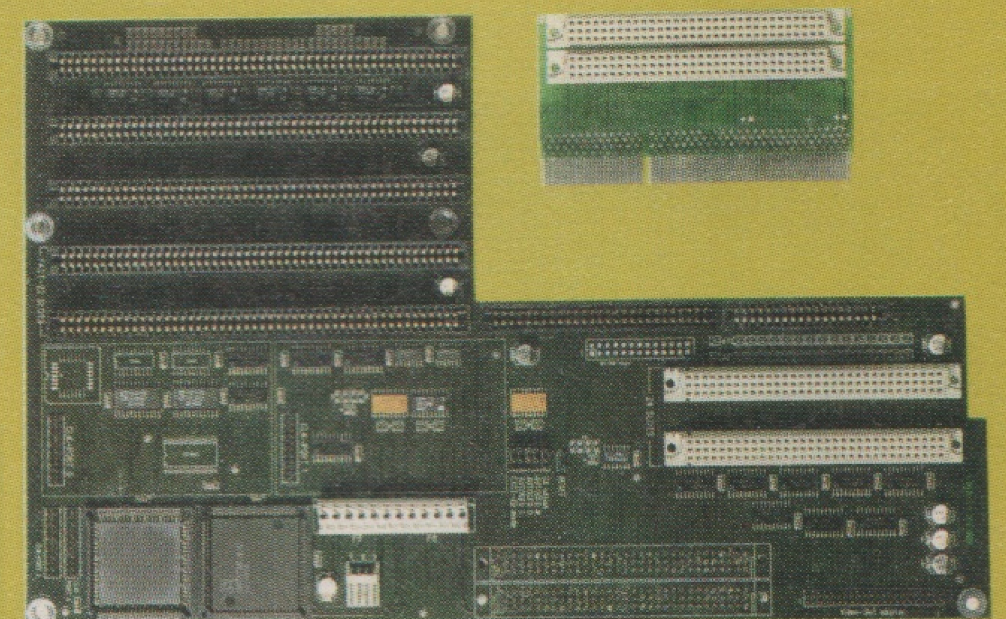
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New Z4 and bundles!

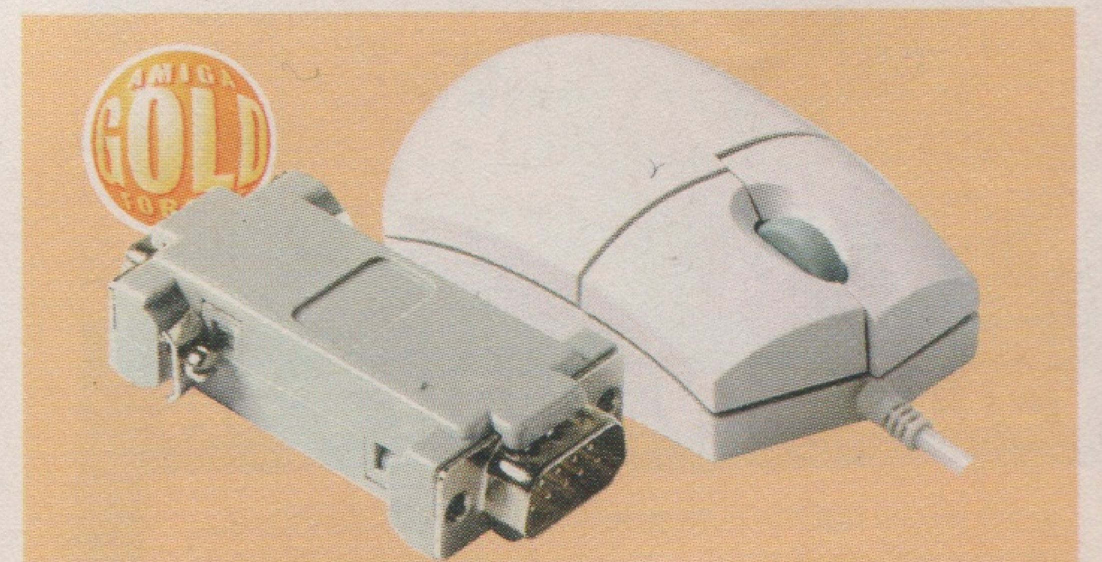


the new A1200 tower Z4 board

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Logitech requires Punchinello

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AMIGA FORMAT Contents

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PHOTOGENICS
POWERBALL
TALES FROM HEAVEN
WARP3D V3.0

KEY: Regulars Games Serious Creative Readers' Stuff

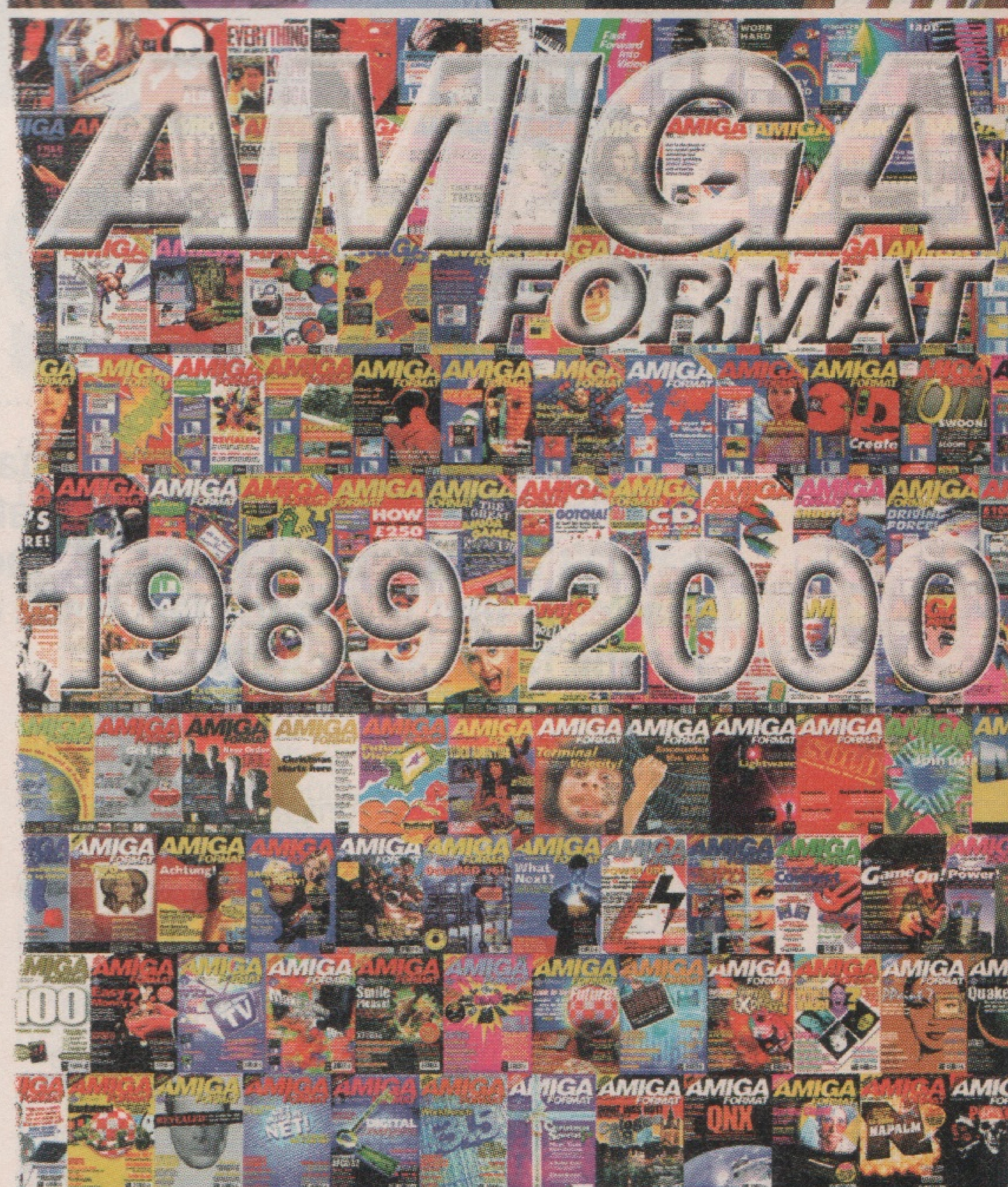


SCREEN PLAY

SERIOUS

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AF'S REVIEW POLICY

...is very simple. ***Amiga Format*** is written by the most experienced Amiga users in the world and what we say goes. OK?

WHAT OUR REVIEW SCORES MEAN

90+%	These products are absolutely top notch. They are hard to find any fault with and that's the reason they get an ***AF Gold*** award.
80-89%	These are excellent products that could be improved ever so slightly. They are well worth your cash.
70-79%	A very good product with a few flaws. Items that get a score in this range are still good, but need work.
60-69%	Above average products which need improvement to get a better score.
50-59%	Average products get average scores.
40-49%	Below average and needs a fair bit of work to make it worthwhile.
30-39%	Needs a lot of work for a good score.
20-29%	Something fatally wrong.
Under 20%	The absolute pits.

AMIGA WORLD NEWS

AF to close

The news is all over the net and has been since the middle of March, but for those that don't know, or haven't noticed our cover at all, the fact of the matter is that this is the last issue of *Amiga Format* for the forseeable future.

As my email to the afb mailing list shows, the decision to close *Amiga Format* was not taken lightly and, while the Amiga market is still going strong, it's no longer strong enough to support a magazine like *AF*.

The team will still be around, however, so if you see us, buy us a pint to celebrate *AF* and mourn its passing...

AFB EMAIL

Once it was determined that the people on the afb mailing list knew that *AF* was to close, it was up to me, Ben Vost, to send out an email to them to appraise them of the exact situation. I've put in much of the email I posted to the list here.

The closure of *Amiga Format* means the end of an era for me. For thirteen years (pretty much my whole working life) I've been involved with the Amiga market in some capacity, whether that be in sales, distribution, freelance consultant and writer, or journalist and editor on *Amiga Computing* or *Amiga Format*.

All this time I've been at the heart of the Amiga market and I've met and got to know some fantastic people, not least of whom are my readers. I've used some fantastic software and seen hardware dreams come and go. I've probably spent in excess of ten grand feeding my obsession and will carry on using the equipment I have at home for a long time to come.

As for us, you have no cause to fear on my or Richard's behalf: Rich has a job on *Linux Format* as a staff writer, working with erstwhile *Amiga Format* editor Nick Veitch. As for me, I hope you'll look favourably on Future's new launch – *3D World* – where I'll be deputy editor and website editor.

3D World will be aimed at professional 3D artists and those looking to get into that market, whatever the platform. I will be honest and say that although the only important criterion for inclusion in *3D World* is image quality, the speed at which those images need to be rendered, and the quality of the support software, means that I don't think there'll be much, if any, Amiga coverage and that saddens me too.

For those of you who are subscribers, there's no cause for alarm. We aren't a fly-by-night company that will let you down when it comes to dealing with your subscription. All subscribers will get a letter included with your final subscription issue, that will explain all the options.

As far as *Amiga Format* goes, I am not yet personally convinced that Bill and Fleecy will be able to achieve all they want to, but if they do succeed I'm sure that Future Publishing will be one of the first publishers back into a new thriving Amiga market, and you can bet I'd want to be back. As such, although my new job will probably take me into the world of PCs and workstations, you can be sure I'll keep an eye on what's going on here and I've promised Bill McEwen I would remain part of the AAC in order to be better able to tell him where I think he's going wrong.

In the meantime, I don't think that the Amiga market has died, I just know it's got to the stage where Future Publishing can't sustain *Amiga Format*. At the end of the day, the only reasons for this are an increasing unprofessionalism in the marketplace and a lack of people willing to part with their money.

There are plenty of good dealers out there that have their customers interests at heart and it's up to you to make sure that their level of service and support don't go the way of *Amiga Format*.

On a personal note, it's not so easy to convey emotion while writing an email. Suffice to say that this page would be wet if it were a letter I was sending to you all.

FAQ

There have been many of the same questions aired over and over again while this has been going on, so I hope that this mini-FAQ will help clear up some of the points.

Q. Can't Future start the magazine again?

A. I'm sure that if the Amiga market picks up, Future will want to have another Amiga mag.

Q. Can't Amiga keep *AF* going?

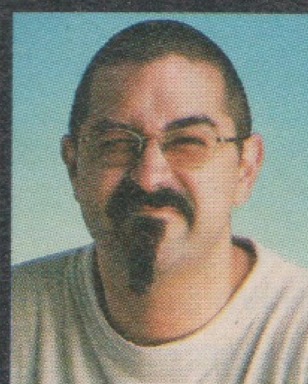
A. Not really. It costs a lot of money to run a professional magazine, on an ongoing basis, and even if Amiga could stump up the necessary cash every four weeks, I'd certainly rather they used the money for putting the Amiga back on top where it belongs.

Q. Are you going to work for any of the other Amiga magazines?

A. I don't think so. I shall have my hands full with the new magazine anyway, and Rich will be busy working on *Linux Format*. However, I shall carry on using my Amiga and will put in appearances at shows and on the afb mailing list.

Q. Will afb continue?

A. Yes, afb has nothing to do, financially, with either *AF* or Future, and as such will continue to provide answers to questions and a forum for the discussion of all things Amiga for the forseeable future. Come and join in: details are on page 79!



AF in view...

For a last ever issue, this sure was tricky. We're sitting here at twenty to eight on Monday evening (20th March 2000). The last week has truly been a nightmare – with having to tell everyone exactly what has happened to *AF*, but this was leavened by the fact that I got back some absolutely lovely emails congratulating me, and the rest of the team, on a job very well done with *Amiga Format*. To those I haven't thanked personally, big thank yous to all of you – my excuse was that I was trying to get this lot finished. For those of you that don't have access to the net, and more importantly, our afb mailing list, *Amiga Format*'s closure will come as something of a shock. Hopefully it'll be enough of a shock to give you that push towards getting on-line, and prevent further ignorance of what's going on in the world on a timely basis.

For those who think that the "Amiga community" is a bunch of loud-mouthed mean thickies, I'll just point you to the news story about the afb members raising more than £1500 in less than a month (with Future's help).

This as much as anything that's happened in this godforsaken month, raised a lump in my throat at the amazing generosity of those that contributed.

As for me, I'm not going anywhere. I shall continue to use my Amiga at home, and I hope you do too. I look forward to seeing some of you for that promised beer you mentioned, and I shall be pleased to speak to anyone – just catch me before I've had too many of those beers! That's it then: pack up your tents and go home now, and don't forget to take your litter.

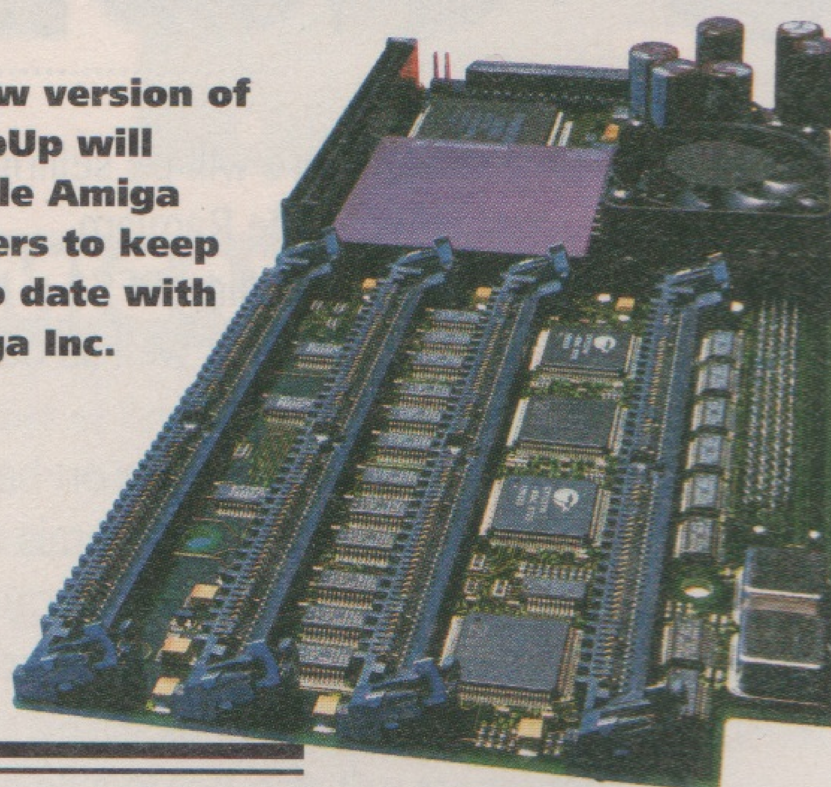
Ben Vost



NG AmigaOS for classic Amigas

It was announced in an Executive Update posted on the Amiga, Inc. website on March 10th that Haage&Partner will be working on a new version of their WarpUp kernel to allow the next generation Amiga platform to run on existing Amigas equipped with a PowerPC processor.

This is big news for Amiga owners, since it means that they can use and upgrade their current systems safe in the knowledge that they will not become immediately obsolete with the release of the new platform. In its previous incarnation Amiga, Inc. talked vaguely about a "migration path" for owners of so-called Classic Amigas, but this is the first time a concrete solution has been proposed. The fact is, since the new Amiga platform is based on Tao's hardware-independent Elate operating system and Tao already support the PowerPC processor, there was no good reason why existing PPC Amigas should be left out.



A new version of WarpUp will enable Amiga owners to keep up to date with Amiga Inc.

> This means Amiga owners can use and upgrade their current systems safe in the knowledge that their systems will not become obsolete

Haage&Partner have also stated a commitment to port their existing applications to the new platform, including their Storm development system.

The Update also says that Amiga, Inc. have been in discussions with DCE – who hold the licence to manufacture phase5's range of PowerUp boards – and Met@box – developers of the soon-to-be-released AmiJoe G3 cards with a view to products from both companies supporting the new OS. A more detailed announcement is expected shortly.

Meet me in St Louis

The Developer Box will have been demonstrated and available for purchase at the St Louis show on April 1st. The Developer Box is not a consumer product, but will be a computer running enough of Tao's operating system and whatever layers Amiga themselves are providing to allow programmers to start writing software for the new platform. A hardware specification was not stated, but it's a fairly safe bet that it will be based on standard PC hardware. Since the Tao's Elate is hardware-independent, this should not put-off Intel-hating Amiga users.

The St Louis show is also a chance for Amiga users to meet new members of the Amiga team. Randy Hughes is the new VP of Sales and Strategic Business Development and was previously employed at the Java technology company, ThinWeb. Vince Pfeiffer, formerly of GraphOn Corporation, has been appointed as the new VP of Operations. The third new employee will be a name already familiar to Amiga users. Gary Peake, famous for Team Amiga amongst other things, becomes Amiga's Director Of Developer Relations and Support. See the Amiga Inc. website for the full story on the latest recruitments.

Other news covered in this Executive Update show that Amiga, Inc. are keen to improve communications within the Amiga community. An Amiga Deal Network has been initiated to bring dealers and Amiga, Inc. closer together, to make dealers more aware of developments and to allow easier feedback on products. Also, a regular newsletter has been announced that will be available to all Amiga users freely via the Internet. This will be edited by Fletcher Haug, former editor and publisher of Amiga Informer. Lastly, the the Amiga Advisory Council has been resurrected

This, the third Executive Update from current president Bill McEwen, is his longest to date. The full letter is available from http://www.amiga.com/.

THE DEVELOPMENT TEAM

Amiga has been quietly signing up developers to work on the new Amiga platform. Many of the names on board are Amiga stalwarts of old and include Dean Brown, of DKB and the designer and producer of a wide ride of hardware expansion and accelerators for existing Amigas; Wouter van Oortmerssen, the creator of the E programming language; Andreas Kleinert, famous for his image processing software and picture datatypes; and Gary Peake.

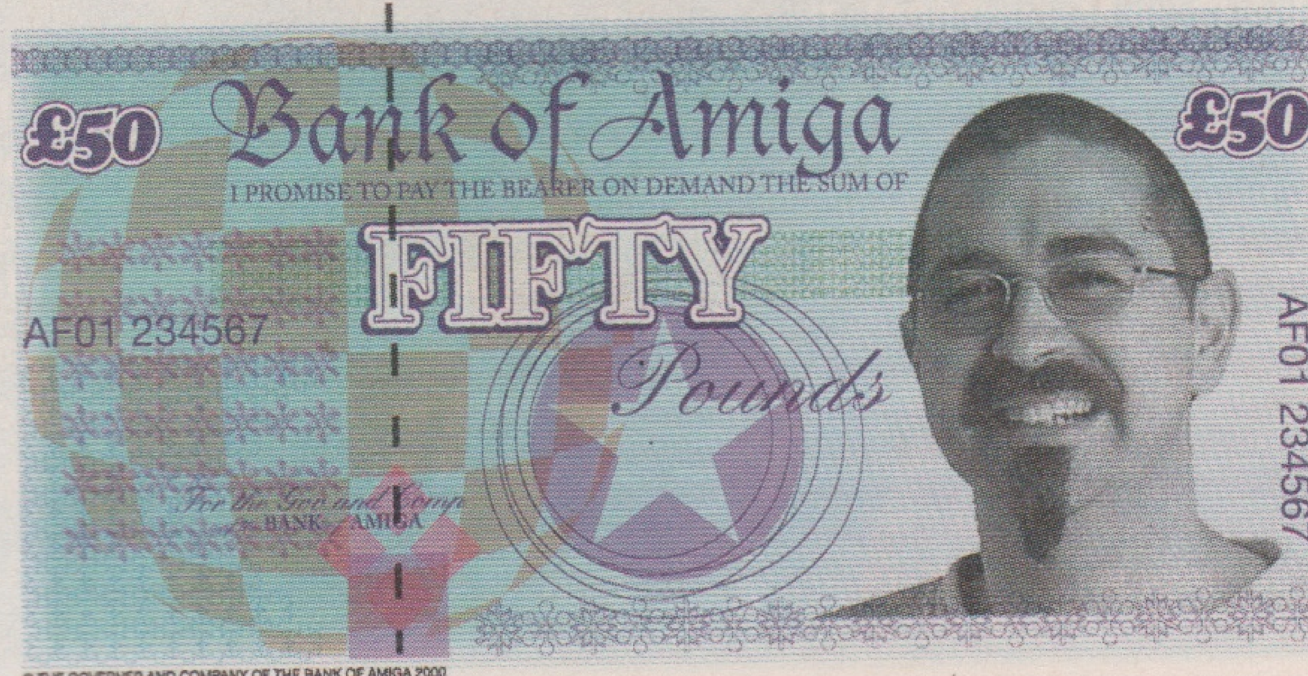
Other members of the team are all experienced developers from all over the world and all are familiar with the Amiga. These are Dave Taylor, Trond Werner Hansen, Ray A. Akey, G'o'tz Ohnesorge and Jonas Gustavsson.

Continued overleaf ➡

afb appeal raises £1500!

At the start of March, realising that the time had nearly come to pay once again for the annual cost of removing the ads on afb, we posited that we could raise some cash for the ad removal, but also that some to go toward a charitable cause.

As a result, the members of the afb mailing list managed to raise a massive £780 in just three weeks that'll go towards helping with the problems currently afflicting Madagascar or Mozambique.



Better still, Future Publishing have said that they'll match whatever we raise, so in three short weeks, afb members have managed to raise a total of more than £1500!

Many, many thanks go out to all the members of afb for their generosity and also to Future Publishing for theirs. Just think: if you were on afb, how much more could we have raised?

The Amiga community has raised £1500 in aid for Madagascar – that's you guys...

The Kickstart Show is coming!

Don't book your holidays for May: The Kickstart Amiga User Group http://www.kickstart-amiga.co.uk based in Ottershaw, Surrey is pleased to announce the third Kickstart Amiga Show.

The Date: Saturday May 27th 2000
The Time: 12-5pm The Place: Brook Hall, Brox Road, Ottershaw, Surrey
Admission: £1

The Kickstart Show, sponsored by Amiga Inc and Analogic is now in its third year. The show regularly attracts hundreds of people in search of a bargain and the chance to meet and to chat with other Amiga Users.

The Kickstart Amiga User Group is one of the biggest Amiga user groups in the country, with a membership diverse in age, experience and professional backgrounds. The show will consist of a wide range of commercial and individual Amiga dealers – selling both new and second-owner Amiga software, hardware and compatible peripherals, along with games competitions throughout the day, demonstrations of Amiga applications and new hardware and the opportunity to join the Kickstart Amiga User Group.

In all, it's a great day out where you can have fun, get help with your Amiga problems and meet other Amiga users.

STANDS

The Kickstart Show features over 25 stands selling new and second-user Amiga software and hardware. Commercial Amiga dealers signed up so far include Forematt Home Computing, which has returned to the show for a second year. Forematt will be demonstrating Clickboomís new game Nightlong on our 8ft projection screen as well as selling a vast array of Amiga software. Crystal Software will be selling a range of Amiga titles, while Ramjam Consultants will also be selling PFS3 – the new Amiga disk filesystem as well as other Amiga goodies.

Several other retailers will be on hand selling hardware, software, peripherals and computer supplies. A number of usergroups will also be attending including Seal and the Amiga Support Association.

Refreshments will also be on sale and a Kickstart membership stand will also be on hand to answer questions and handle membership enquiries from show-goers. If you would like to take a stand, please contact us using the details below.

Do hurry, as floor space is limited!

COMPETITIONS

There will also be various Amiga give-aways throughout the day. Amiga Inc has kindly donated two A1200HD Magic Packs, which will be given away in a free prize draw, while Analogic are also donating prizes for our gaming competitions. Other Amiga merchandise and prizes will also be given away throughout the day. Games contest planned include multi-player *Quake, Sensible Soccer* and *Skidmarks*, all played on Kickstart's very own 8ft projection display. (Competitions subject to change.)

If you would like a stand, please contact us using the details given below – but please do hurry as floor space is limited

DEMONSTRATIONS

Kickstart members will be demonstrating various applications, including Word Processors, Desktop Publishing, Graphics and Animation tools, Operating System enhancements and much much more. Also see Mac emulation under *Fusion*, PC Emulation under *PCx* and Amiga emulation using *Amiga Forever*. (Subject to change.)

More information will follow in the coming weeks as we finalise the list of exhibitors, events and show sponsorship. Contacts: For show enquiries and stand bookings, please contact Ray McCarthy (Show Promoter) at ray-mccarthy@cwcom.net or call (01737) 215432.

For all other enquiries, please contact Chris Green (PR Co-ordinator) at editor@amigainsight.com or call (07971) 273850.

DIRECTIONS TO THE SHOW:

Directions to Brook Hall: From the M25, J11 take the Woking exit, at the next roundabout take the first left onto the A320 to Woking, at the next roundabout take a left again into Murray Rd, about 20yds on the left is a car park, park here and Brook Hall is straight in front of you, on the corner of Murray Rd and Brox Rd. Public transport.

Ottershaw is close to Woking, which is easily accessible from London and the South. From Woking to Ottershaw transport is by Bus or Taxi. Taxis cost about £5.

PLEASE NOTE: All software sold by anyone at the show must be original and proof of ownership may be required from vendors before entrance to the sale is permitted. Kickstart reserve the right to refuse entrance to any person, regardless of a booking. Kickstart cannot accept responsibility for any goods purchased at the show. Kickstart reserve the right to add or remove events from the show without notice.

Blittersoft news

Plenty of action at Blittersoft this month means that we have the first shots of the new BoXeR motherboard which is nearly ready to go on sale (just pending final testing now). Blittersoft are also starting a free ISP for Amiga owners and have the full upgrade for the OS3.5 version of AWeb available at £24.95. In other news, Blittersoft have now got complete versions of SoftLogik's *PageStream 4* in stock, complete with proper manuals and boxes.

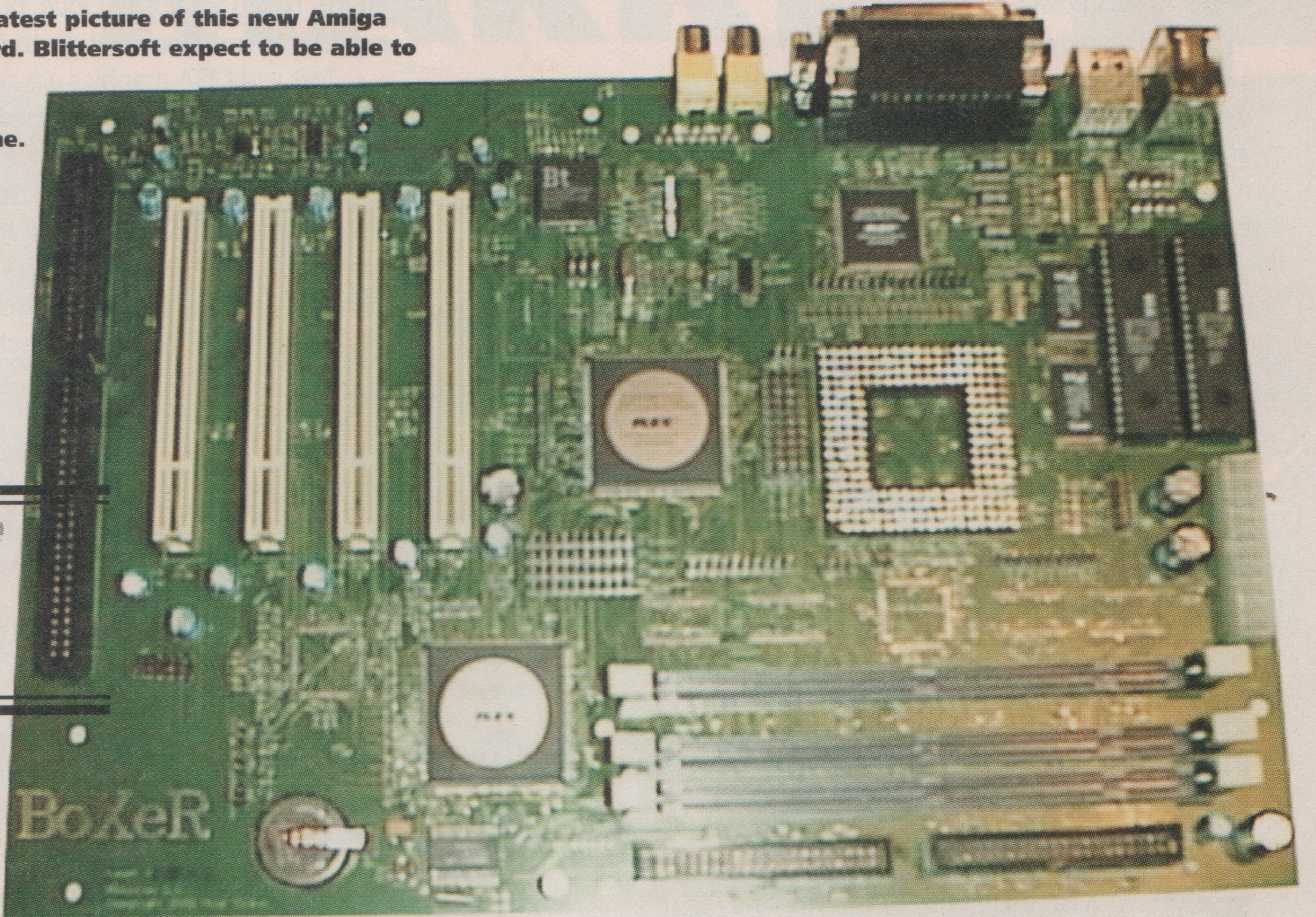
Blittersoft are also starting a free ISP for Amiga owners and have the full upgrade for the OS3.5 version of AWeb at £24.95

The price is £169.95 for the full version or £59.95 as an upgrade from *PageStream V3.3*. They also have new versions of *Art Effect* and *Amiga Writer* due any time now.

Art Effect 4 promises to have new effect layers, channel operations, special text layers and comes on a CD-ROM packed to the gunnels with extra fonts and clip-art for you to use, while *Amiga Writer 2* will be able to import Microsoft Word documents and has PowerPC optimisation, OS3.5 printing support, supports anti-aliased TrueType fonts and again comes on a CD filled with fonts and clipart.

In the more distant future (we have no further details) a new version of the *Storm C* suite will also be launched. Blittersoft can be contacted on 01908 225454.

Here's the latest picture of this new Amiga motherboard. Blittersoft expect to be able to deliver it in about three months' time.



100 issues ago

AF36 July 1992

AMIGA FORMAT



We look at what was going on in the Amiga market 100 issues of *AF* ago...

- Cover Feature: New! New! New! – *AF* covers the new A600 in depth and concludes that it really will be a nice machine. We also had the first review of the A570 CD-ROM drive (for the A500, not the A600 naturally), and concluded it was not brilliant, especially since that volume knob on the front didn't change the sound at all (hint: try the headphone socket Pat!). Of course we're much wiser now...

- On the disk: two floppies (it's a permanent fixture from now on), one with a simplified version of *CanDO 1.5* called *CanDO Jnr* and valued at £100, the other with a demo of *Crazy Cars* from Titus and a bunch of other stuff.

- News: the A500 is to cease production in favour of the A600 and Smiths are to promote the aforementioned 600 in their new competition on bags of Quavers to win one. Commodore are also to offer on-site maintenance with the A600 and *AFCD* compilers EMComputergraphic get a mention for starting up a font library. *AF* speculates that the A200 will be replaced by a machine with better graphics and sound and Amiga animations sweep the board at Bit.movie in Italy.

- Prices: Commodore's A570 CD-ROM drive would set you back £299.

- Games reviewed included: *Monkey Island 2, Le Chuck's Revenge* (US Gold), *Fire and Ice* (Renegade) 89%, *Parasol Stars* (Ocean) 87%, *Links* (US Gold) 92%, *Sim Ant* (Ocean) 73%, *Lure of the Temptress* (Virgin) 92%, *Legend* (Mindscape) 88%

- Serious products reviewed included: *Datascan* (Pandaal) 75%, *Power Scan 2* (Power) 90%, *Mediastation* (Newtek) 86%, *Hotlinks Editions* (Softlogik) 73%, *Art Department Professional* (ASDG) 85%, *DSS8* (GVP) 89%

Notes: it's funny how history changes your perspective. Damien was all in favour of the A600, with great hopes for the fabled A800 and PCMCIA ports in all Amigas, but we were proved sooooo wrong on that one!

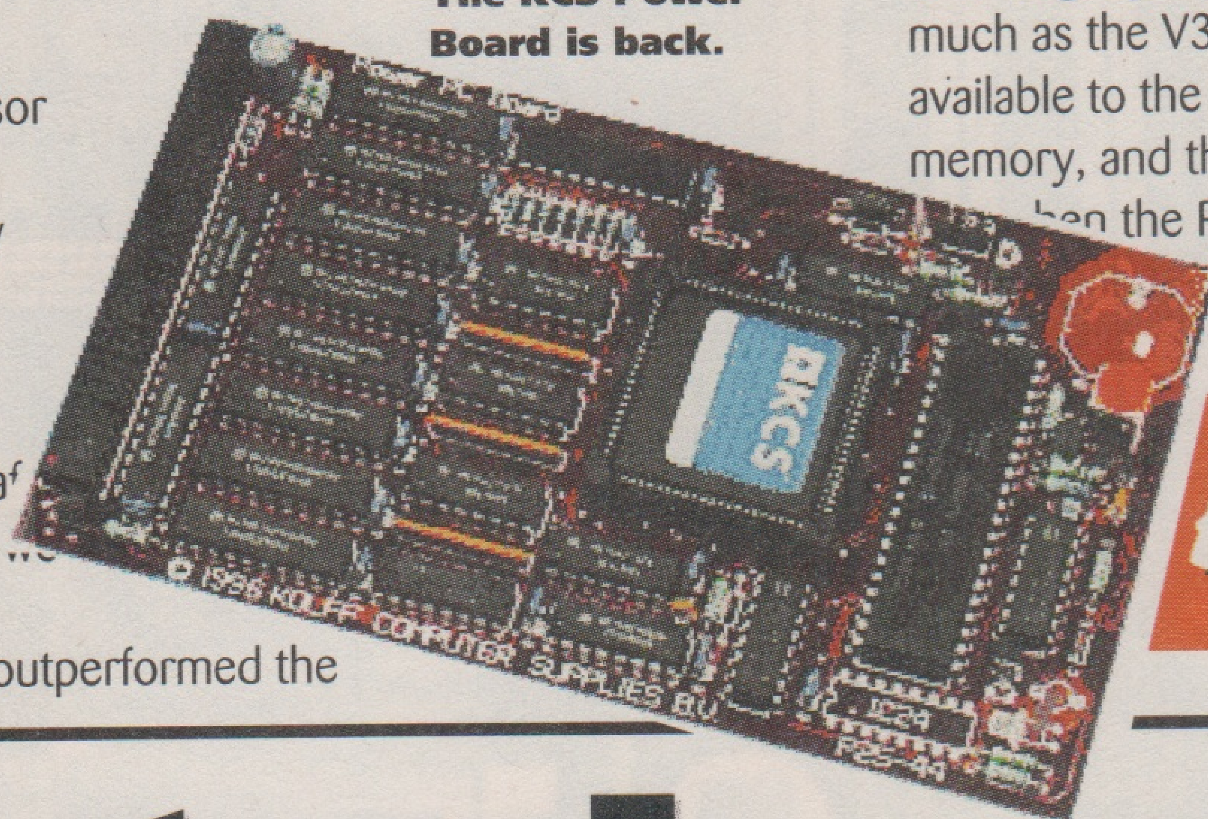
A500 Power PC

The KCS Power board is back – confusingly bringing the term 'Power PC' to the A500 trapdoor. This board was dubbed the 'Power PC' long before IBM and Motorola took up the name, and in fact it's a 16-bit hardware PC emulator.

The NEC V30 processor gives it about the same 'power' as one of the early Amstrad PC compatibles – competent to run MSDOS up to version 6.22, but not Windows – af... this is an A500 expansion ... talking about!

In reviews it typically outperformed the 80286 based Vortex AT-Once, but don't expect it to run *Doom*, let alone *Quake*.

Text and CGA graphics are retargeted to the A500's ECS display, and the Amiga provides Soundblaster emulation. There's one megabyte of RAM on the card – as much as the V30 can handle. Half that is available to the A500 or 500+ as expansion memory, and the rest can be used as a RAM ...hen the PC clone is not active. There's ... as well.



The KCS Power Board is back.

This 'Power PC' costs 35 euros including delivery anywhere in Europe, or 45 euros elsewhere. This does not include MSDOS, but the equivalent DR-DOS and Amiga/PC utilities are available on the Web, at http://www.lineo.com and also at http://www.compcity.nl/a500power/english.htm

Contact Computer City in the Netherlands on +31-10-4517722.

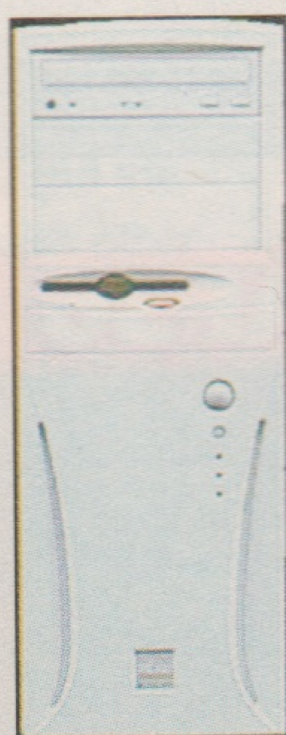
A500 Power Board

Eyetech news

Eyetech have been busy of late working on new products. The first off the line is a new parallel port sampler which works at rates up to 100kHz and is compatibly with virtually all popular sampling software including OctaMED and Scala. The EZSample is priced at £29.95.

Eyetech have also come up with what they reckon will be seen as the ultimate keyboard adaptor to fit over CIAs on an A1200 or A4000.

It works with Amiga and PC keyboards and allows for multiple keypresses, multiple key mappings, special key functions, on-line help and more functions and will cost £34.95.



Software-wise, Eyetech now have the latest version of *TurboPrint (TurboPrint 7.10)* in stock, along with the new version 5 of *ScanQuix* which now comes on CD and includes all scanner drivers in the price. After Easter, Eyetech will have PPC accelerator cards and graphics boards in stock from the new batch produced by DCE Computers now that

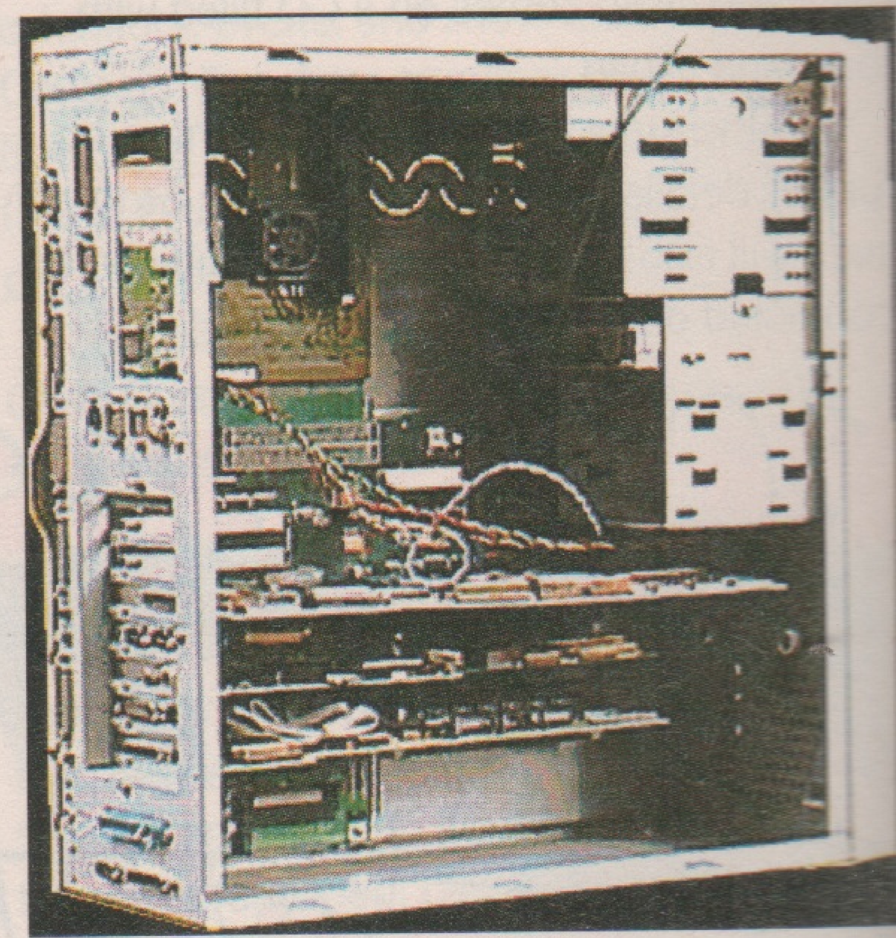
Demand is already high and is increasing all the time, so advanced ordering can be seen as a must

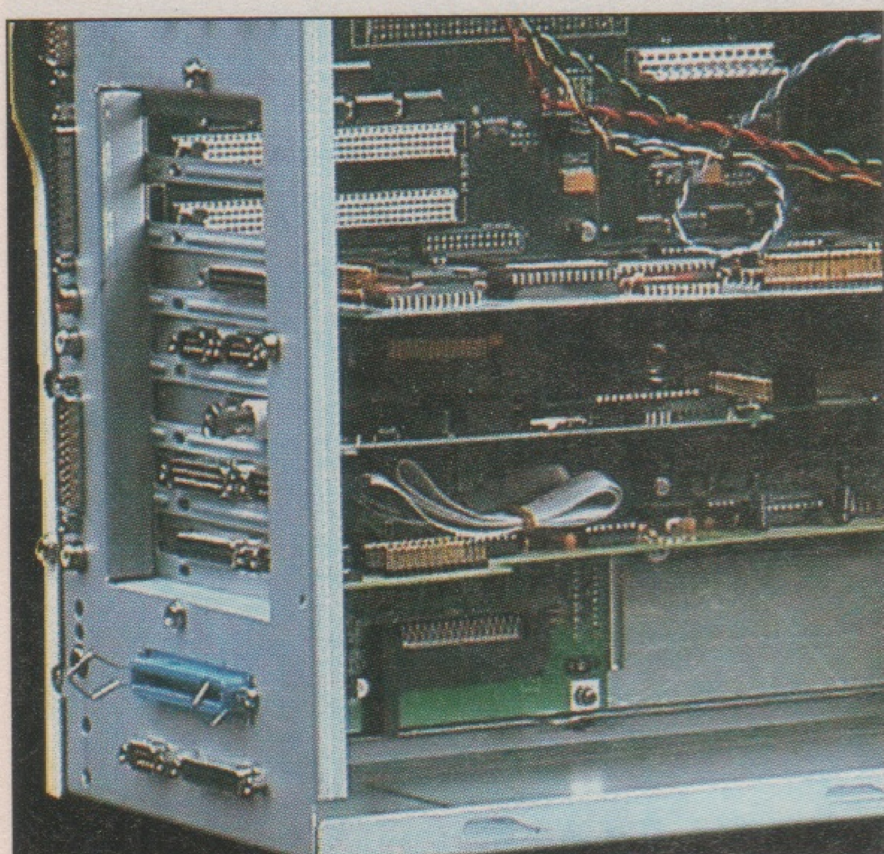


phase 5 have liquidated. Demand is already high and expected to increase, so advanced ordering can be seen as a must. Eyetech have assured us that that don't take money up front for these products and won't make a cancellation charge for those wishing to cancel their order.

Finally, Eyetech are celebrating the launch of their Z4 tower – no longer will people have to have their systems bolted to chipboard! In keeping with the existing range of towers that Eyetech already sell, the Z4 tower will be another super-MIDI tower with three 5.25" and four 3.5" bays. Likewise, particular thought has gone into the positioning of the back panels and areas for access. The EZTower Z4 is available for £99.95, or £199.95 including the Z4 expansion board. Other options & bundles are available – please see the Eyetech advert in this issue or the Eyetech Website.

For further details on any of these products give Eyetech a call on 01642 713185 or visit their website at http://www.eyetech.co.uk.


The Z4 tower in all its glory.


The tower has been specially modified to suit all Amiga products.

ASp meets Thor

Ian Greenway's Sinclair and Amstrad Spectrum 128 emulator ASp is the first to make use of Thor's mmu.library to give reliable bank switching on any Amiga with a memory management unit. The version with Spectrum 128 sound was favourably reviewed in *AF* last issue; the beta version 0.73b just made it onto the last *AFCD* – updates will be on Aminet, including a fix for a known bug when saving the Z80 snapshot format.

Experiments here suggests that it's the first usable Spectrum 128 emulator for 68040 Amigas, and it runs well on other MMU-equipped systems too. See *AFCD52* and Aminet: misc/emu/ASp.lha.



Is this the first usable Spectrum emulator?

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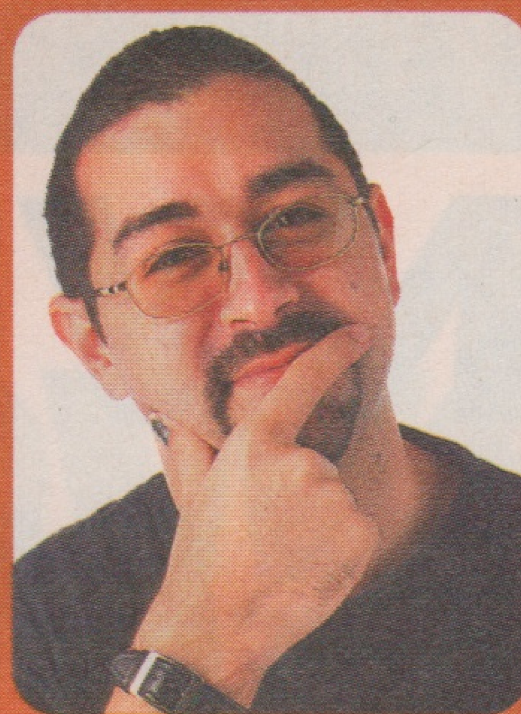
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See ya!

All good things must come to an end. While Amiga Format is no more, there is plenty of good reading matter coming from Future Publishing to replace it.

For myself, I'm moving onto new CGI magazine 3D World, while Rich is going to help Nick Veitch on Linux Format. There are plenty of other ex-AF staffers still working at Future too. Steve Jarratt is editing What DVD?; Dave Taylor edits .net; and there are writers, art editors and production people all over Future from Amiga Format, so you'll never be too far from one or other of us.

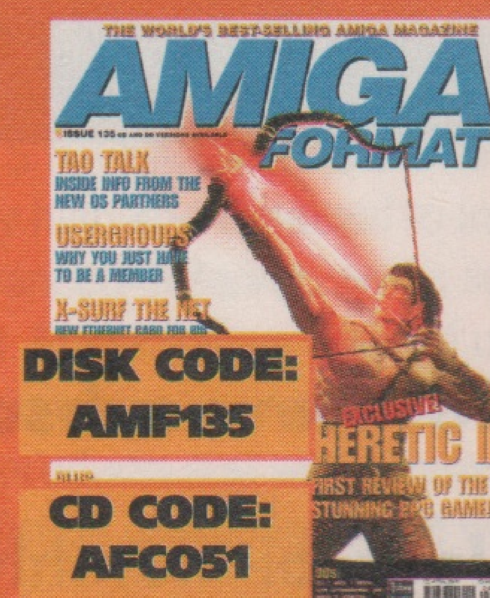
Thank you all for your continued loyalty and bearing with us over the last eleven years. While Future has no Amiga magazine right now, I'm sure that if the tide turns and the Amiga once again becomes a force in computing, we'll all be clamouring to be back on an Amiga mag, chomping at the bit to bring you all the latest news, reviews, features and tutorials. Until then, see you all soon!

Ben Vost

AMIGA FORMAT **last chance**

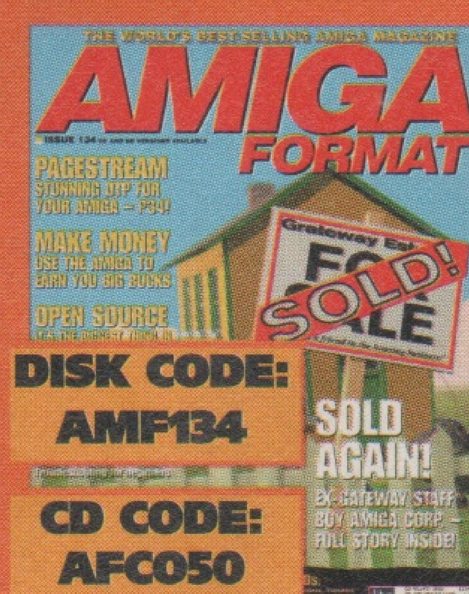
Back issues

Missed AF? Don't miss out completely, order now while stocks last...



Issue 135

INSIDE We spill the beans on the Tao takeover, tell you all you need to know about usergroups - and publish our exclusive review of Heretic II.



Issue 134

INSIDE Get stunning DTP for your Amiga with PageStream. How to make money (with and without PageStream) – plus the low-down on Open Source.



Issue 133

INSIDE Follow our complete novice-to-expert guide to OS3.5. See the results of our exclusive test of ViewSonic's flat panel display, and our review of Tornado 3.



Issue 132

INSIDE Network your computers and get them talking to each other. See into the future at Köln '99. And... Wipeout 2097 is here!

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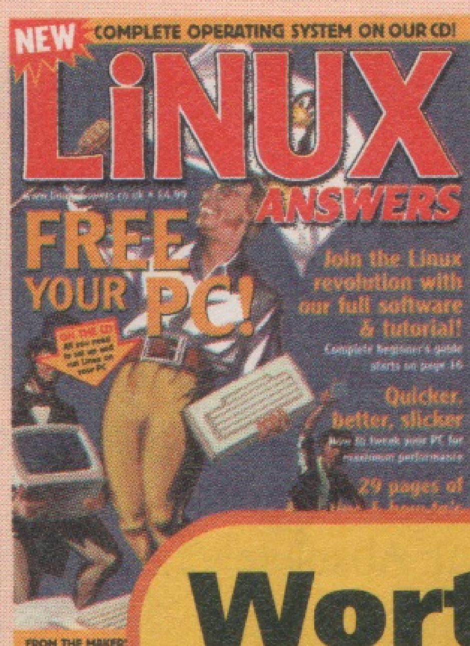
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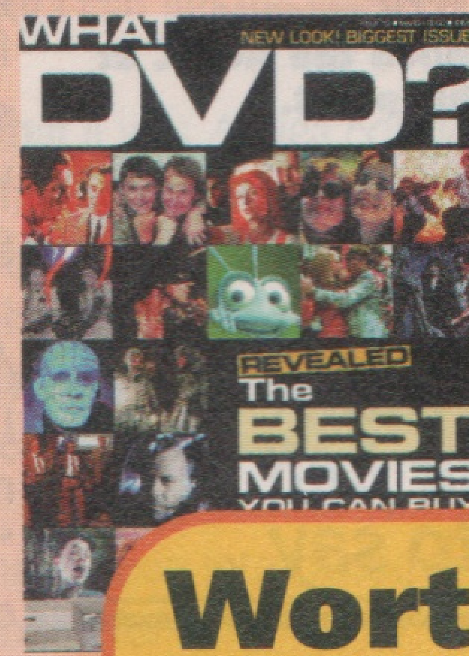


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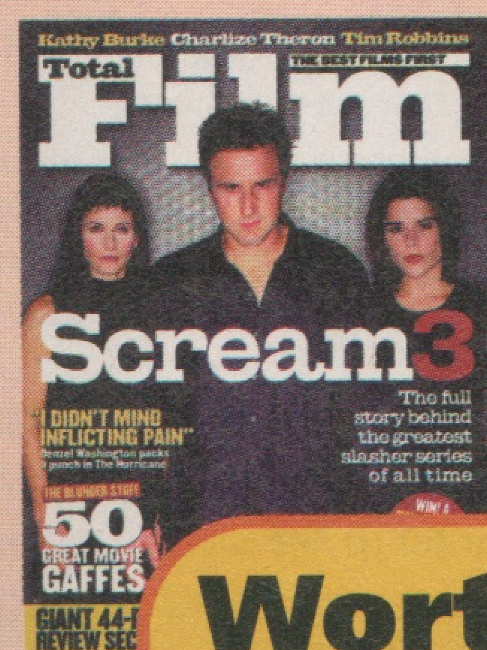


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AF through

Wherein Ben gets the AF staffers to meet up and discuss the past, present and future of the Amiga

Well, what else would we do? To celebrate, mourn and dissect the phenomenon that was *Amiga Format*, and to examine the Amiga in depth, we went to the pub. Eleven of us convened, at very short notice, at one of Bath's premier, but soulless, drinking spots in order to eat, drink and talk Amiga. The eleven good men and true were myself, my right hand man Richard Drummond, our games writer Paul Cavanagh, erstwhile editor Nick Veitch, several-time games ed Andy Smith and one-time production editor Mark Wheatley. Colin Nightingale made up



AF7 (Feb 90) – First rumours of the CDTV emerge, called the AC-DC at this point.

the team of ex-*Amiga Format* staff and also on hand were freelance backboners Simon Goodwin, Nick Lamburn (getting his first and last work for us in this issue, though I'm sure there would have been many more of his articles had we continued), ace Imagine artist and tutorial writer Andy Kinsella and all round top bloke and hardware specialist Alan Redhouse of Eyetech fame.

I had some pre-prepared questions to put to the team – some from my own fevered imagination, others contributed by some of that bastion of Amiga fans afb, but I wasn't prepared for just what they were going to say...

> I had some pre-prepared questions to put to the team but I wasn't prepared for just what they were going to say

AS: I'd just like to say that as Bob Wade and I sat there for our fourth 4am in the office morning on the trot, we said to each other: "Bloody hell, this mag's never going to take off!" How wrong we were. For thirteen issues more we both worked like that!

BV: Okay all, first question: "Do you think covermounted software killed the market?

AS: Certainly not. Absolutely not.

SG: Yes, I think covermounted utilities did. I think the decision not to covermount games was quite tragic for the Amiga since it meant that, commercially speaking, the Amiga had to be a games platform; eventually no-one could make money from trying to sell serious software because the magazines kept laying out cash for it all and no-one was upgrading.

The plus point was that if you were going to write anything serious, you didn't do it for money, you did it for Aminet.

NV: On the one hand I can see how people

THE PEOPLE ATTENDING:



Andy Smith (AS)

A contributor to *AF* on countless occasions.
Favourite AF cover: AF17 – the Mondrian cover
Best Hardware: The A500. A stunning bit of kit – affordable and powerful.
Best Software: The *Juggler* demo and *Defender of the Crown*. These sold more Amigas than anything. They looked like nothing you've ever seen before. Actually, one of the best bits of software was *Mavis Beacon Teaches Typing*, in conjunction with the beautiful keyboard I had on my Amiga.
Worst Software: *Timegate* on the CD32, which I reviewed for *Amiga Power* in their last issue. I gave it 0%.



Nick Veitch (NV)

The longest-running editor of *Amiga Format*.
Favourite cover: AF72 – the first in the long series of "sold" covers.
Best Hardware: One of the PPC cards, the Blizzard PPC.
Best Software: Syzygy's *Digital Universe*. It was tremendous: well ahead of its time on any platform.
Worst Hardware: I can't think of a truly bad bit of hardware because I think that people have too much sense to release something that was truly bad but there have been bad versions of things.

Paul Cavanagh (PC)

Expert games writer.
Favourite Cover: *AF20* – the Roy Lichtenstein cover.
Best Hardware: PSXPort. A great idea that makes up for the lack of new Amiga joysticks.
Best Software: *Heretic II*. A game that really shows why you want a stacked Amiga.
Worst Hardware: CD32 joypad. It just is: they're rubbish aren't they? Badly designed, especially the direction pad.



Nick Lamburn (NL)

Fresh-faced freelancer from this very issue.
Favourite Cover: AF19 – the Jamie Reid cover that said: "If you've got one of these, get this".
Best Hardware: The Apollo 1240. It's brought such life to my machine.
Best Software: *Blitz Basic*. The fastest implementation of Basic ever. It was very good, but above all, it was very cheap.
Worst Hardware: I'd have to say the AMax 2 – for the simple fact that the third time I plugged it into my floppy port, the edge connector snapped right off it!



Colin Nightingale (CN)

Ex-art editor, now having to listen to endless Eric Clapton at *Guitar Techniques*.
Favourite Cover: The chameleon one we didn't use (for *AF113*). (It had a three-horned chameleon staring straight out of the cover with the line: "Invasion of the BodySnatchers!")
Colin never knew the wonders of owning an Amiga, and for that we pity him. It's no wonder he turned to drink for solace.



Mark Wheatley (MW)

Man-boy ex-prod ed.
Favourite cover: I couldn't really choose between either the one Colin mentioned, or the Internet one saying that the net was so easy a child could do it: the cover Col did ended up looking like a baby impacted on a car windscreen! (for *AF112*).
Best Hardware: The Bug joystick. Absolutely superb: it allowed to have your best games of *Sensible Soccer* and *Speedball 2*.
Best Software: Probably one of those two games.
Worst Software: *Microcosm*. This was supposed to herald the future but, in the event, it was just so disappointing.

the ages


Mouthful of beer? It's how I spent most of the afternoon, actually.



AF54 (Christmas 93) – more show of power from AF with a Christmas special of Cannon Soccer especially written for the coverdisk. Also, the first appearance of a thirteenth issue in the year.

can construe that giving away software was harmful to the market. On the other hand, most of the magazines at Future were doing very badly until we started putting stuff on the coverdisk. *Amiga Format* basically paid for Future Publishing and if we hadn't covermounted stuff, Future Publishing probably wouldn't exist today.

AR: As a retailer, I would say that anything that appeared on a coverdisk became impossible to sell, irrespective of version. People were always just unwilling to upgrade; we're only just now starting to sell *ImageFX* in any sort of quantity because there was a giveaway on a coverdisk about five years ago.

People just say "Why should I pay money for something I can get for free?"

NL: All I can say is that it was *Amiga Format* that got me programming with the AMOS coverdisk in 1992. However, if you get a coverdisk, then it's hard to persuade yourself to get the latest version, you just think: "Well this one's good enough".

AK: I would never have been introduced to *Imagine* if it hadn't been for *AF*'s

GREAT IDEAS THAT AF WAS TO INTRODUCE

Feel free to poach these great ideas for your own Amiga mag: they're of no use to us now...

1 – Matter of Fact. This was to be a little snippet that went into the gutter on each review page that gave some interesting details about, or relating to, the product being reviewed.

MATTER OF FACT

■ Mitsubishi is Japanese for "three diamonds", hence the logo they use.

■ Sony's first product was a tape recorder.

2 – *Photogenics* tutorial: Paul Nolan was to give us an excellent six chapter tutorial all about how to get the best from *Photogenics 4*.

3 – *ImageFX* tutorial: Likewise, Kermit Woodall was signed up to write us a guide to *ImageFX*.

4. Competition time: We were going to start a competition based on materials we supplied, a bit like the *Imagine* competitions, but with a wider scope. We would have samples for songs, pictures to base images on, objects to 3D model, and so on.

5. *AFCD* competition time: We were going to hide a single file somewhere on the CD each issue and, had you been able to spot it, there would have been a small prize up for grabs.

Simon Goodwin (SG)

AF's best ever freelance writer.

Favourite cover: My favourite was the yellow chameleon emulation one (*AF113*).

Best Hardware: By a long way, Action Replay. An absolutely stunning gadget for anyone that wanted to know exactly what was going on inside their Amiga. The fact that it was made by Datel is one of those extraordinary aberrations which I can only say baffles me.

Worst Hardware: It has to be the Emplant board. It didn't do anything but you had to have one anyway, soaking up one of your precious Zorro slots. It had a whole load of extra expansion options which never turned up.

Best Software: The bit of software I spent the most time on, other than programming my own, was *Populous 2*.

Worst Software: *AFS*. There are so many people I know who were active Amiga developers, lost everything to the bleeding edge of *AFS* and never picked the ball up again.

Richard Drummond (RD)

Frequently tardy with copy, but when it arrived it was great.

Favourite cover: Paul trying to sell secondhand Amigas (*AF129*).

Best Software: *EGCS*.

Best Hardware: Although I dislike them for many reasons, it has to be the phase 5 PowerUp boards. They don't do autoconfig, there are the problems with PowerUp versus WarpUp, but they did give us a glimmer of hope.

Worst Software: MacOS is definitely the worst software I've ever come across in my whole life, with the possible exception of *GEM*: t frustrates the hell out of me.

Andy Kinsella (AK)



Imagine expert just starting on a teaching course.

Favourite cover: Helmeted bloke suffering effects of G-force (*AF82*) – it was also the first one in which I had a gallery entry.

Best Software: *Imagine*, then possibly *DPaint*, *PPaint* and *PageStream*. (Oi! Choose one! – BV). Okay, I think that *PageStream* is probably the best currently developed bit of Amiga software.

Best Hardware: The Blizzard 1260 in my A1200.

Alan Redhouse (AR)



Hardware tinkerer extraordinaire and all-round good guy.

Favourite cover: Not really interested. I preferred the inside of the mag.

Best Hardware: Our new Zorro 4 tower! (Oi! No plugging your own stuff! – BV).

Best Software: Oliver Kastl's *IDEFix*. Excellent CD-ROM support, some hard drive support. A bit of a bodge, but brilliant software.

Worst Hardware: a PC.

Chris Livermore (CL)

AmigaSoc co-founder, and a very nice man, though, we'd have to say, not as half as nice as his soon-to-be wife, Polly.

Favourite cover: Umm... I'm not sure... (All right, don't worry about it: let's move this thing along now – BV).

Best Hardware: A1000. I remember being really young and my dad brought one home from work; it had three games on it and it was absolutely fantastic. It may not be a great Amiga, but when you look at what else was available at the time, it just beat everything hands down.

My dad worked in computers and we had PCs and Macs and then this Amiga came in and it was: "Wow! Colour! Wow! Sound! Look at this!"

Best Software: AmigaOS because I've never found another bit of software that comes as close to letting me do exactly what I want to do.

Worst Hardware: The Atari ST range.

Worst Software: Windows – in all its guises.

Continued overleaf ➡


AF staffers celebrate the fact that Future has paid for the beers!

covermount of *Imagine 2*. However, *DrawStudio* was put on coverdisks as a "Lite" demo version, but it was too functional and no-one bought the full thing.

CL: You can't blame its lack of success on the mags though. The authors should have been aware of it. Covermounting demos is a very good idea, but you have to be careful not to make them too useful.

AS: The PlayStation wouldn't be where it is today, as a mass-market gaming platform, if it hadn't been for the games demos on *Amiga Format*.

SG: We have to remember that the A1000 had terrific problems in the market against the Atari ST, which was a bit cheaper.

When the A500 came out, there was a tremendous transition brought about – not really by the power of the machine, in anything bar one respect: that it was a phenomenal floppy photocopier. Really, hardware sales stemmed from that; they stemmed from the fact that there were people with suitcases full of 3.5" disks who didn't play the games on them, or use the utilities; they just swapped the disks with their friends!

The Amiga's ability to copy was directly relevant to its success, although as a software author myself, it is hard for me to come to terms with that.

BV: And now a more general question: is the Internet killing UK magazine sales?

AS: Absolutely not.

NV: It's responsible for promoting UK magazine sales.


Rich Drummond in his usual sober state.



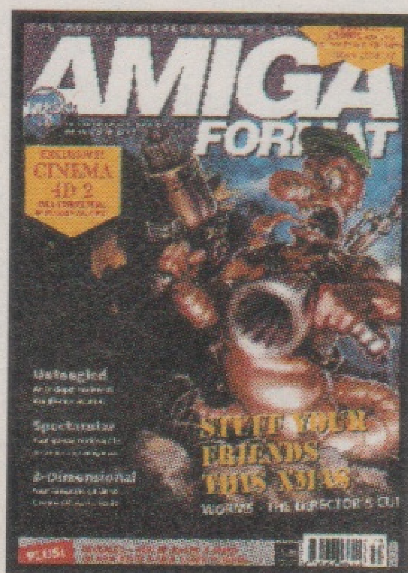
AF105 (Christmas 97) – Power and DCE announce their soon-to-be launched A5000. CyberStormPPC finally reviewed.



AF60 (June 94) – We review the A4000T, and delve into the internet for the first time.



AF116 (Nov 98) – AF welcomes ex-readers of CU Amiga magazine in our first issue as the only Amiga magazine in the marketplace.



AF92 (Christmas 96) - phase 5 announce A\Box.

ANDY SMITH SPEAKS!

We knew *Amiga Format* was going to be something special right from the beginning. When I worked on the first issue of the mag (I was Reviews Editor) we had six weeks to put it together. Naturally, that meant we sat around and played games for five weeks and had to get everything reviewed and written in the last week. This 'reviewathon' became legend as Bob Wade and myself sat until 4am most nights, banging out review after review. Then we had to do another issue. Then another. *Amiga Format* has always been special (sure we'd cock-up now and again) because it's never lost sight of what it was intending to do: inform and entertain Amiga owners and open their eyes to what the wonderful machine in front of them could really do.

I am proud to have been involved with *Amiga Format* at various stages of its life and, like everyone else, would like to thank all of its readers for their support and suggestions over the years. Sniff.


"You git the snike and you kin poke it right in the ah!"

AS: I think the Internet will kill UK magazine sales, but not for a few years: Internet mags are the way forward.

CL: The Internet in the UK is absolutely pitiful. There is no free Internet access; it may be coming, but it's not here yet. Amiga owners on the net – and there aren't many of them – get their news first on the net, which certainly hasn't helped Amiga magazines but that's only a small part of *AF*. The rest of it – the tutorials, the reviews etc – is invaluable and cannot be competed against by the net.

SG: I don't think the Internet will kill off a healthy magazine, but it can certainly harm one that's already struggling: it removes some of the people who could otherwise keep the magazine going – and that's certainly true of *AF*.

I think another thing that's harmed *AF* and that is indirectly related to the net is Aminet. Although it's a wonderful thing that's enabled us to have more than 50 CDs stuffed full of things that you cannot possibly look at in a month, it's tempting – when you've got three or four CDs like that – to ask yourself why you need more.


Paul arrives from a dodgy deal as Andy Smith treats us to his Wallace impression.


Andy K: "Hic! I don't shink it's a electric shaver, y'know Rich..."

AR: It's a completely different sort of medium. It's easy to sit in bed, on the loo or on a train with a mag...

AS: You could have a laptop...

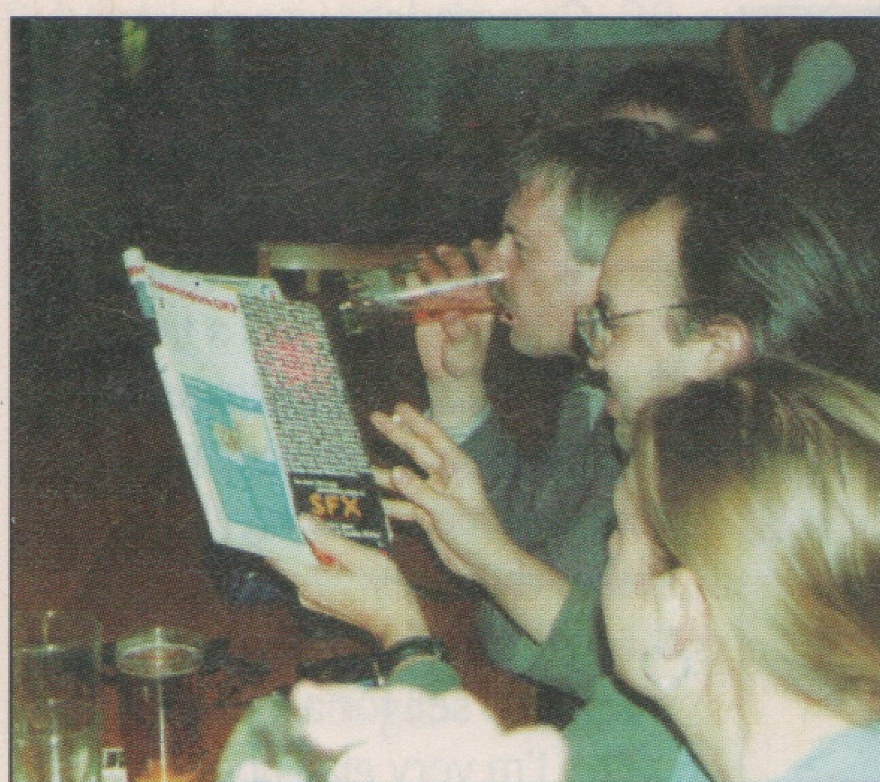
AR: Would you really want to sit in bed with one of those on your knees? Unless hardware becomes flexible, light LCD media, I don't think it'll ever replace print.

BV: Yes, but we're talking about now.

NL: I've always been interested in magazines and want to get into journalism. I've read *Amiga Format* since the late '80s – well, to be honest I was too young to read it then; I liked the pictures though. I can see that the Internet is probably going to be the way forward, but magazines will always have the advantage of being real things.

AS: Yes. Publishers are always telling us that it's somehow satisfying to have a magazine in your hand, whereas seeing something on a computer screen is completely impersonal and doesn't belong to you.

SG: Magazines win out currently, but they do need light to work: they don't work without it!



Nick reminisces over past glories (AF72 actually) while Alan drowns his sorrows.

RD: One thing to argue for the mags is their permanency compared to a website. You buy a magazine or a book and you can easily go back to it in ten years' time.

AS: Most websites have archives...

BV: The web hasn't even been around for ten years! How many sites from 1993 can you still access?

CL: The real testimony to traditional media is that where I work, we get a lot of manuals on CD-ROM. The first thing anyone does is print them out to read them.

BV: Okay a question for the Amiga owners here: firstly, what would you like to see from Amino, Amiga Corp, Amiga Inc, whatever they'll be called, and secondly, will you continue to use your Amiga with the demise of *AF*?

AK: As long as it works, I'll use it: it does what I want.

RD: My Amiga still works, so I'll keep using it. The reason I'm still using it is that it's got a lower frustration level than any other computer. As for what I want to see from Amiga this year? A product – any product that someone could buy.

CL: I'm going to keep on using my Amiga because it's easier than anything else, and until something comes along that makes the things I do on it easier, I shall carry on using it. I don't care that it's a ten year old machine; it still does the job better than anything else out there on the market. If there was a PC running Windows that did it better, I would honestly use it, but I don't believe there is.

NV: I've got about five different Amigas at the moment, only two of which work. One of these I use quite often, mainly because I wrote lots of useful ARexx scripts which still work. It's very easy to program the Amiga. I have a solar-powered shed project which will be run from an Amiga (more details later). As for what the owners of the Amiga can do now, I'm at a bit of a loss as to what routes are open to them now.

In the past, there was a tremendous opportunity to embrace the developing internet community in some way but several periods of inactivity have made that null and void.

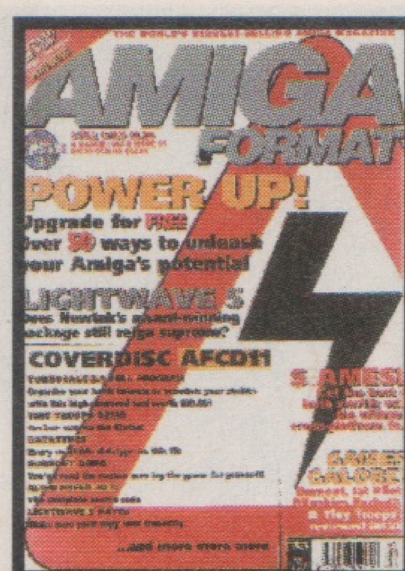
Of course, there are still opportunities for non-Wintel platforms and I hope the Amiga will be a part of that in the future.

AR: To me the Amiga is probably the only intellectually robust operating system around. It's simple to understand: it does its job well. I don't think the hardware is particularly important, providing it does the job. We actually sell the Amiga into industrial markets as well, and one of the big issues is that it's the only platform that works, as it is entirely plug and play. You slap it into the mains, switch it on and it does the job you want it to do.

(applause)

Simon asked me what we'd do if Amiga sources dried up and I just don't know. I can't see anything that is going to be as cost-effective for reliable plug and play industrial systems. Some people have complained about memory protection issues but the Amiga has never had them so programmers tend to be more careful and if you have a bunch of well-behaved programs on your machine, it never crashes. It's very easy to understand and program. Also, having a GUI and a batch interface (shell) is really important for industrial applications.

SG: I've got rather a lot of Amigas. If I spent my time counting them I wouldn't get much creative work done! For me, creative work is what the Amiga is about and the Amiga is the best set of meccano I've ever had – and I never run out of "bits". I think the new Amiga does need to be something qualitatively different, although the concept of integrating hardware and software so that the two fit together naturally is



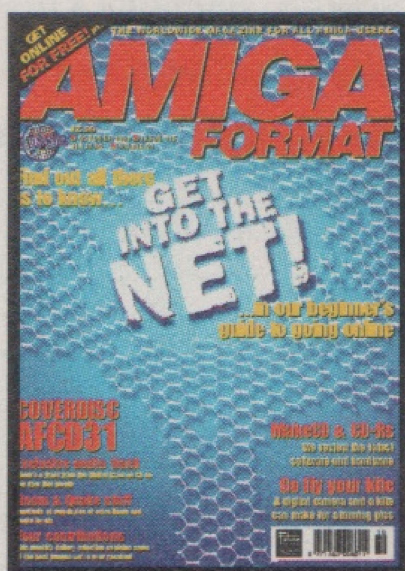
AF95 (Apr 97) – Silica Shop finally liquidates. Quake appears on the Amiga, based on stolen source code. clickBOOM eventually release a full-licensed version in 1998.



AF86 (July 96) – Viscorp cancel all Amiga Technologies' plans and say they're going to concentrate on ED – a set-top box.



AF97 (May 97) – Gateway revealed as new purchasers of Amiga with new Amiga products promised by the end of the year. I get red hair for a while for Comic Relief.



AF115 (Oct 98) – BT announce Home Highway and the Amiga is ready to take it on. Fleecy Moss explains what "digital convergence" means, especially for the Amiga.

GREAT IDEAS WE DID INTRODUCE:

I think these were great bits of magazine craft and made *AF* better for its readers:

1. All the reader contributions. Whether it be Reader Games, reviews or contributions to the gallery or CD particularly, every bit of user interaction in *AF* led to improvements in the mag.

2. afb. This mailing list started properly on the 4th January 1999 and now it has nearly one thousand members. As much as anyone, they help determine what goes in the mag and several ideas are tried out on the members before they appear in *AF*. As a source of willing guinea pigs it's great. As a source of excellent news, information and gossip it's unsurpassable.

3. The *AFCD*. I'm my wholly biased opinion, I honestly think the *AFCD* was the finest Amiga CD to come out, especially by the end of its run. With tools like AFCDFind, AFCDView and Prefs and AFBase, it was the most accessible, flexible and consistently well-produced CD out there.



"Squeeze it really, really hard and you can hear the components inside squish!"



Everyone stares at Nick. For ages. Without blinking.

Continued overleaf ➡



"Hands off my pie!", growls Simon "Sleepless in Warwick" Goodwin.

absolutely crucial to what I find the Amiga to be. I don't agree with the idea that it's just a chipset or an OS. It's the way those two are put together by someone who understood the issues of both which makes the Amiga so strong. However, the future Amiga needs to be a general-purpose consumer appliance that is completely flexibly programmable; it needs to be something you can connect to a satellite dish, or any other kind of incoming connection, or to any other output. You have to be able to avoid having to buy two things because neither of them do exactly what you want.

The Amiga concept has a much better chance of delivering that than anything else I've seen – and I've certainly been looking.

NL: I've always described the Amiga as a super micro. It captured computing from the '80s, when everyone did their own thing. It was accessible to everyone. The user is always in control of the system, not the other way around.

SG: One thing struck me as extraordinary when I first saw an Amiga in 1986: having been involved with home computers since the '70s – my first Apple had a handwritten manual – the only computer I've seen in the last twenty years which has really been different from the others is the Amiga.

When people describe the Amiga as an '80s machine I think they are right. All of the other machines – Macintosh and PC compatible alike – are still '70s machines by comparison.


The tape recorder was passed around the table all afternoon and hardly got wet.



AF126 (Aug 99) – AF shows off the designs for a new Amiga and celebrates ten years of existence.



AF50 (Sept 93) – CD32 launched and reviewed.



AF66 (Dec 94) – Chelsea FC threaten to sue Commodore over non-payment of their sponsorship of the club. AF talks about RISC processors in conjunction with the Amiga for the first time.



AF41 (Dec 92) – A1200 revealed and A4000/040 reviewed. Workbench 3 gets a skimpy (one page) going over. OpalVision (the first affordable 24-bit gfx card) is reviewed, but RTG graphics cards are still some way off.


We've all worked hard on this issue, it's just that on Rich it really shows.

NV: The Amiga had it all built in from the start; other companies, like Microsoft or Apple just had to tack it into their systems.

CL: With Windows or the Mac, you have to adapt to their style of working; on the Amiga, you use it as you want.

BV: One for the old-timers: what single, individual action do you think led to Commodore's demise?

AS: Trying to sell the thing as a sodding business machine!

RD: The problem was the fact that they wanted to sell the Amiga as a PC!

NL: Jay Miner said he wanted to make the ultimate gaming experience for $500 when he came to the Amiga from Atari.

AR: Any business succeeds providing that the owners and drivers of the business understand and have a passion for the product they're selling.

The real reason that Commodore and Escom lost it is that they had no understanding of, or passion for, the product. The Amiga could have been a success in certain markets, just as the Mac was in DTP. The owners and management didn't appreciate that and didn't take advantage of it.

SG: Commodore was reckoned by most people to be going bust in 1984. They probably would have done if it hadn't been for the Amiga. The fact that the Amiga succeeded was a tribute to the technical people getting one over on the money people. They carried on being able to make what they wanted to, rather than what the money people wanted to sell for a decade or more. I'm very glad about that. I'm not sure I would would still be in computing if it weren't the case; I would have got bored.

BV: Next question for hardware types: if the Commodore "hardware gods" were still around, what do you think their next chipset would consist of?

SG: I think it would have an enormous amount of completely uncommitted logic and it would be possible to upload into it the design of whatever you wanted to have, much as we currently do with software and as Mick Tinker will hopefully allow us to do with the BoXeR. I think that is the future of digital logic (as opposed to computers).

NV: I think that Simon's right, and if those people aren't available to do it, then someone will be in the very near future.

CL: I agree with Simon; if you look at all the hype surrounding Transmeta, you need hardware that can adapt and be re-programmed to run whatever instruction set you throw at it.

RD: The thing is that there are so many people out there now with the expertise needed to make a brilliant graphics chipset, say, that I think the hardware guy would say that they were going to cherry pick and glue them all together. Commodore never designed a processor for the Amiga. The tight coupling between the hardware and software is good in a way, but it becomes a millstone when it comes to upgrading.

NICK VEITCH SPEAKS!

Editing *Amiga Format* at its peak was the best job I've ever had. I like to think we created a great magazine – certainly around 160,000 people seemed to think so. But as well as being professionally rewarding, because I was writing about the Amiga, it was great fun too! And what made it really great was the sense of community. This wasn't just some label applied to Amiga owners, there was, and still is, a real community spirit about the Amiga market, which you just don't seem to get in other markets. The magazine, hopefully, reflected this, and we certainly couldn't have created such a magazine without lots of help from you, the readers.

I'd like to thank you all (well, apart from Kevin), for making *AF* possible!


Nick speaks his mind about the Amiga market and AF.

BV: If the original developers were around today, would they agree with either Bill and Fleecy, or with the Phoenix Consortium?

SG: No, they'd do it their own way.

CL: I'm not sure they'd agree with either of them but I think they would have been impressed by the idea of AmigaObjects.

I really think that in the near future this will appear; whether it's on an Amiga or not, it's the way to go.

NV: If they were still around, I don't think they'd be doing what either team is trying to. They'd be doing something that we wouldn't realise the quality of for five years, since it took at least that long to start exploring the depths of the current Amiga.

BV: Do you believe that OS 3.5 has been a success? Do you expect to see any further upgrades in the future?



It's not all doom and gloom in the Amiga market, you know.

AK: I haven't actually bought 3.5 yet, but I will do, honest.

CL: I think it's all bollocks. There's not much in 3.5 you can't do in 3.0 or 2.0 just with a load of hacks; they've just integrated them. Having said that, though, integrating those hacks into the OS, so they become "official" rather than "hacks", is definitely a good thing.

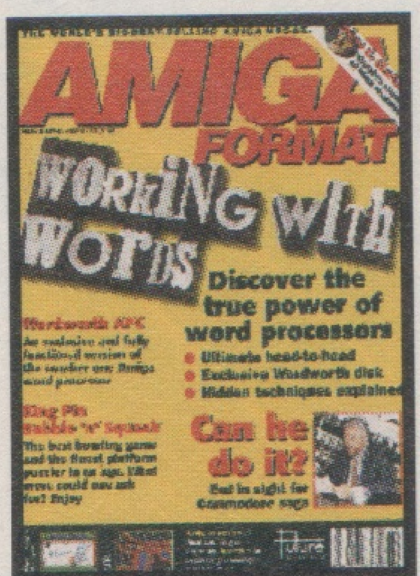
AR: It gave a good boost to the existing users and it helped us retailers too. The big problem we've had since Jim Collas made his "Billy Graham" speech at the World of Amiga show was that no-one was prepared to do, or buy, anything until they knew what was happening.

Suddenly people worked out that nothing was happening and OS3.5 came out – and we have sold it and people had some reassurance.

NL: I don't have 3.5 yet. It was proof that some effort was being made at the top.

RD: I think OS3.5 is an excellent product that may not have expanded on OS3.1 much – but it's a start and it proves that while AmigaOS may be an "ancient" operating system, there's plenty of room for evolution yet.

BV: What promised product that never appeared do you think might have made a difference to the history of the Amiga? What about the PAL Toaster?



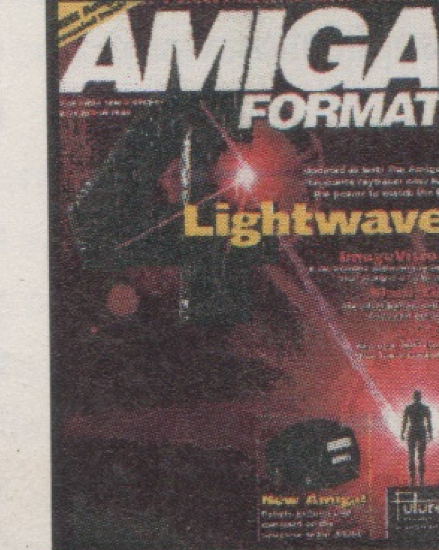
AF70 (Apr 95) – Unisys decide to start charging for GIF.



AF30 (Jan 92) – A special version of AF goes in the box with new Amigas thanks to a deal with Commodore.



AF21 (Apr 91) – Workbench 2 to come to all Amigas and as from the Screen Gems bundle the A500 will have 1M as standard. Also, Future announces Amiga Power and Amiga Shopper.



AF84 (May 96) – Amiga Technologies reckon they'll have a PowerPC-based Amiga available in the first half of 1997. First look at the Walker prototype.



Gulp. Burp! Ahhh, that's better.

RD: The continuing non-appearance of Petro's 68080, or phase 5's PPC cards?

AS: *Quake*!

BV: *Quake* did appear.

AS: Yes, but two years too late. If the Amiga had been capable of running it when it first came out, the whole story might have been different. Of course, the first networked game was *Stunt Car Racer*. It was the true forerunner to *Quake*.

AR: I think the biggest failure was the whole PowerPC thing. If phase 5 and Haage and Partner had got together right from the start, four years ago, and got it working, the market would be in far better shape now.

NV: If Commodore, or whoever, had brought out a new machine with PPC and advanced graphics, people would have bought it and we could have moved on.

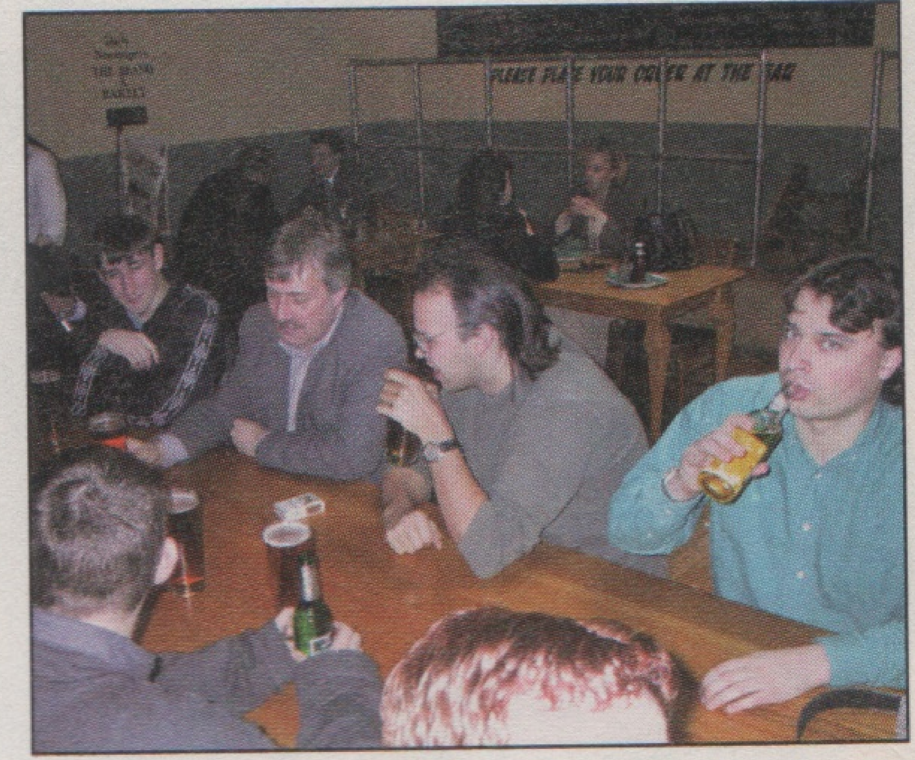
AR: The issue was never the funding: it was the commitment to supporting it.

And so it went on… for many more hours; we could never have made the room in *Amiga Format* to include everything that was said. It may be that the whole transcript goes up on the web at some point soon, but I can't promise.

TOP TEN

While some folk think we're the oldest mag at Future still running, actually *PCPlus* pre-dates us by some years (their October '86 was their first newsstand issue, with an insert into *PCW Plus* – né 8000 Plus – before that). Anyway, the run-down on the top ten goes as follows:

10. *sfx*
9. *.net*
8. *PC Gamer*
7. *Edge*
6. *Mac Format*
5. *GamesMaster*
4. *Future Music*
3. *PC Format*
2. *Classic CD*
1. *PC Plus*



Nick and Alan laugh as two flies drown in their beer suds on the table...

But, just as one last point: if you'd like to carry this discussion further, and join in on it yourself, why not bring the subject up on afb? The mailing list will carry on where we have left off.

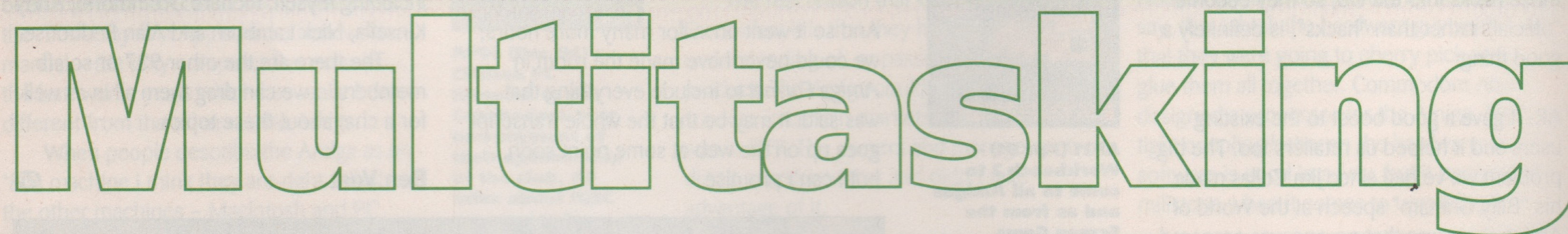
Several people who attended this particular meeting are on there regularly, including myself, Richard Drummond, Andy Kinsella, Nick Lamburn and Alan Redhouse.

The there are the other 937 or so afb members… we can drag them all in as well for a chat about these topics.

Ben Vost 



Contrary to popular opinion, I am actually gesticulating to turn the camera on its side.



Multitasking

Simon Goodwin explains how you can do several things at once, while only doing one thing at a time

Multitasking is the ability to run several programs at once. It's an area where the Amiga continues to wipe the floor with the competition. Other computer systems have belatedly had multitasking grafted on, or adapted from batch processing principles – they can run several programs at once, but as soon as you try to do that, the usability of the machine suffers in an obvious way.

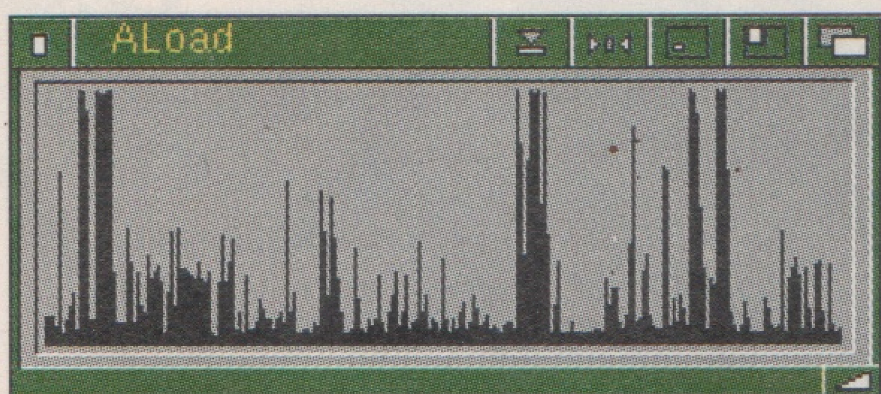
Contrast this with Amiga systems, where you can leave an application like OctaMed working, with multi-channel sound, scrolling and animation on a separate screen, and there's no noticeable loss of performance in other applications – if you couldn't hear the sound, and did not need the chip RAM used for samples, you might even forget that the application was running at all.

The same job on a Mac with twenty times the processing power slugs everything else, and the sound hiccups when you give other programs anything significant to do at the same time. PC soundcards and module players suffer likewise, even on machines with fifty times the clock rate and, ostensibly, hundreds of times greater instruction throughput.

> **Unlike PCs or Apple Macs, the Amiga was designed to multitask from the start, so every application has been coded with resource sharing in mind**

Commodore's Amiga printer drivers may be old, and the port is not buffered, but you can barely tell if the printer is busy when other programs are running. Yet 'background' printing from a Windows NT4 system causes windows to move and redraw in slow motion, and it's all but impossible to swap tasks while using a generic PC scanner – another task that barely impacts an Amiga with SCSI direct memory access.

Unlike PCs or Apple Macs, the Amiga was designed to multitask from the start, so every application has been coded with



ALoad spikes indicate when your system is busiest.

AMIGA RealTime Monitor 2.03 © Jun 14 1994 by F.J. Mertens & D. Jansen

> task 08620d3a NULL task selected

Address	Pri	Stack	Signals	State	Code	Type	Name
089d8bc0	0	3998	00000020	run	ET--	process	ARTM
082827a0	0	4094	00000100	ready	ET--	process	CLI(4):c:ShellTitle
0855e6c8	0	16382	bb801000	ready	ET--	process	Genesis
08620d3a	-128	506	00000000	ready	ET--	task	NULL task
08185e90	5	4094	ffc00001	wait	ET--	task	fd.device,0
08230fa0	0	998	40000000	wait	ET--	task	mfm.device read
082623e8	0	2998	80000000	wait	ET--	process	« ConClip »
08268690	5	3198	00000100	wait	ET--	process	CON
082640d0	0	4094	4000d000	wait	ET--	process	CLI(2):c:sushi

Tasks | Windows | Libraries | Devices | Resources | Ports | Residents
Interrupts | Vectors | Memory | Mount | Assign | Locks | Fonts
Remove | Freeze | Priority | More | Signal | Break | Cancel

The Amiga Real Time Monitor ARTM homes in on the lowest priority 'null task' that soaks up spare processor time.

sharing of resources in mind. Unlike Unix boxes, the Amiga is designed for fast, efficient real-time performance on a specific chip set – the hardware and software were designed together, rather than hooked up opportunistically.

There's no single reason why Amiga systems can multitask so much more fluently than rivals – it's a mixture of software, hardware, and integrated design. There's no guarantee that every Amiga system will live up to the potential. It's possible to 'expand' an Amiga with brain-dead software and hardware that strangles other tasks, but the core system multitasks so well that incompatible extensions soon show their flaws, and Amiga users are relatively intolerant of those. Unlike PC victims, they know how responsive a computer can feel.

This feature explains from first principles how multitasking works, and how the Amiga design makes it better. It shows how tasks communicate and the system arbitrates between them. It tells you how to monitor the processes on your system, and prioritise them for top performance, contrasting the Amiga approach with that of rival systems.

STARTING UP

When the Amiga starts up the processor runs an initialisation routine in Kickstart. After basic hardware checks, this launches a key program called the "scheduler" which supervises other programs. At regular intervals, or whenever a program runs out of things to do, the scheduler chooses one of the other programs and sets it running, storing details of the one it interrupted so it can be re-started later.

This rescheduling takes place tens or hundreds of times a second, so it appears to us that all the programs are running at the same time.



AF6 (Jan 90) – We covered the fact that the 200,000th A500 had been sold.

Fast exchanges and communication between tasks means that programmers can divide and conquer, splitting each application into specialised parts which can be independently tested, extended or replaced. This approach means less code can do more work, in a relatively flexible and extensible way compared with the monolithic rival systems.

These alternate programs are called 'tasks', and each one behaves as if it has the processor all to itself. The scheduler saves and restores all the temporary results or 'context' as it swaps tasks, so each runs in a 'virtual machine', with no need to recognise the existence of any other task.

Executive's Commander can make tasks 'nicer' to others by limiting their share of processor time.

Commander 2.00

NAME	PID	TYPE	PRI	RPRI	NICE
Shell Process	13	cli	-53	0	0
[ShellTitle]	5	bcli	-53	0	0
spool.device	231	proc	-53	0	0
[sushi]	2	bcli	0	0	0
SwazInfo	233	proc	0	0	0
titleclock	261	proc	-53	0	0
[ToolsDaemon]	1	bcli	2	2	0
trackdisk.device	260	task	5	5	0
trackdisk.device	264	task	5	5	0
TWA	222	proc	0	0	0
WBVerlauf	240	proc	-53	0	0
[Workbench]	9	bcli	1	1	0
Xop-Idle-Killer	284	task	-128	-128	0
Xoper	283	proc	-53	0	0
YAM	286	proc	-53	0	0
ZJWatch	225	proc	0	0	0
« ConClip »	241	proc	-53	0	0
« IPrefs »	208	proc	0	0	0
« StringClip »	205	proc	0	0	0

Break | Nice | Update
Signal | Remove | Priority | Quit

SIMPLE SIGNALS

The Exec library provides neat facilities for tasks to intercommunicate. The simplest scheme is called 'signals', and is administrated by the scheduler. Each task can wait for any or all of 32 possible signals to arrive. Half these have system-defined meanings – the other 16 are user-defined, and can mean anything that the signalling and signalled tasks agree upon.

Signals are simple stop/go indicators. They resemble traffic lights, except that the processor can happily watch 64 bulbs at a time, rather than just two or three. Signals are fine for low-level communication as they can be set or tested in microseconds, but they convey little information other than as a prompt for action. To send information back and forth AmigaOS uses 'messages', which can be queued up, sent and replied to, carrying any amount of data each way.

PROCESSES

Most programs on an Amiga are not simple tasks, but 'processes'. These are tasks with knobs on – every process can store extra information besides its own program context and signals.

A process is a superset of a task, with all the task attributes plus better communication with the rest of the system. Processes have a port for messages, a current directory, and support for standard input and output. They can manipulate files, directly or indirectly, opening libraries on disk to extend the system.

A task is a subsidiary 'thread' – an instruction sequence that does one well-defined job, often invisible to the user. For instance, input.device and printer.device tasks link hardware and applications. A process is potentially an application in its own right, capable of direct interaction with the user and the rest of the system. Shell commands and programs launched from Workbench are processes.

SCHEDULING

The scheduler decides which task to run next on the basis of its priority. Low priority tasks only run when there are no higher priority ones ready to go. Applications normally use a priority of zero, and system processes run at higher priorities to fetch and convert data as required. If there's no task ready to run, the Amiga fritters its time away in a 'null task' with a negative priority until a signal or interrupt arrives, giving it something more important to do.

Interrupt handlers are small programs that respond directly to hardware. They can interrupt any task unless specially blocked – a situation that should last for no longer than a quarter of a millisecond, according to developer guidelines. The display beam, blitter, data transfers and timers can all trigger interrupts. Typically these send signals to tasks.

For instance a program might need to read a file. It sends a message to a handler process which understands the disk format – say DF2 or CD0 – and waits for a reply. The handler then sends a message to the device that controls the hardware, be that scsi.device, trackdisk.device, or whatever. While it waits for a reply, the scheduler gets on with other tasks. The device driver issues instructions to the relevant hardware, and then waits for the mechanism to respond.

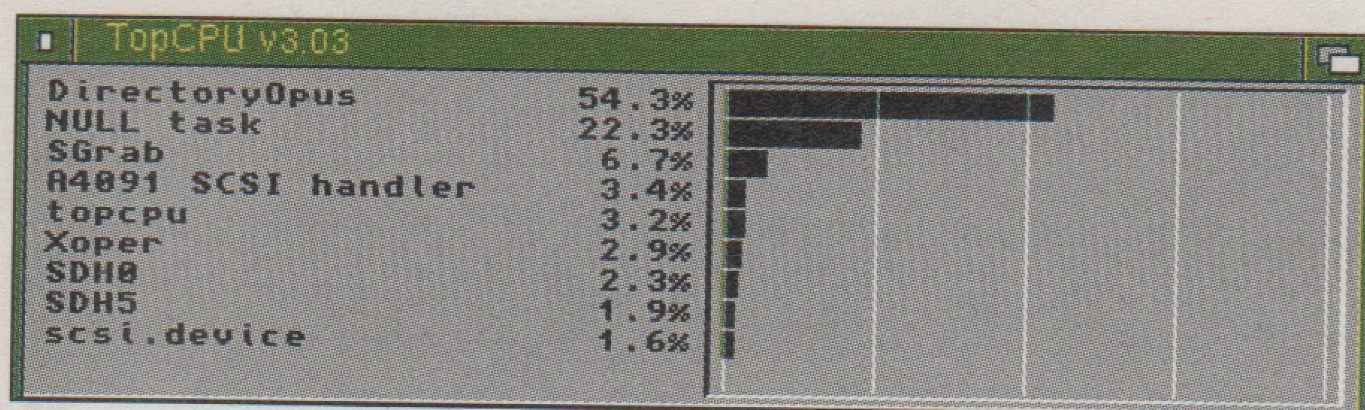
Continued overleaf ➡

DEVELOPMENT

The Amiga was not the first multitasking home computer – that honour belongs to Sinclair's QL, a curate's omelette of clever code and penny-foolish hardware. The Amiga pioneered running multiple programs in real time, with negligible loss of performance or responsiveness, as long as the total workload did not exceed the immediate capabilities of the processor and accompanying chips.

It's no coincidence that both systems were designed around Motorola's 68K processor family. The 68000 and later models were far more sophisticated than 1970s microprocessors, with gigabytes of address space, a consistent approach to memory and devices, and 'user' and 'supervisor' modes ideally suited to fast context switching.

The cornerstone of Amiga multitasking is the Exec library. This is the gateway to the entire system – just one address points at this library, from whence every other part of the system can be accessed. Ariadne's Kickstart Guide to the Amiga memorably described Exec as "how to do several things at once while doing one thing at a time" – and that neatly sums up the paradox of multi-tasking.



SpySystem's TopCPU graphically shows how CPU time is apportioned between tasks.

Each of these steps takes milliseconds at most, usually interleaved with operations started by other tasks. As soon as the high-priority devices and handlers are satisfied, Exec gets on with application processes.

When the drive finds the required data, it signals an interrupt, which wakes up the device driver, which reads the data and passes it on to the handler, which decodes it. Then the application process moves from the 'waiting' list back on to the 'ready' list so it can run again, using the data that has been made available.

This sounds so logical that it's amazing that all computers don't work that way. Yet PCs derive their 'compatibility' from a set of BIOS (Basic Input/Output System) routines which only allow one call at a time. Each device has its own calling sequence, and once invoked, other applications are blocked. So-called 'fast' PCs spend most of their time waiting, often working at the speed of their slowest part. This explains why they feel slower than component specifications would suggest, and the constant merry-go-round of upgrades as each advance is blocked at the next bottleneck. The 'monolithic kernel' of Linux brings similar problems, but at least Linux does not attempt compatibility with the 16-bit BIOS and DOS code that underlies Windows. Linux only runs on 32-bit 386 and later systems, so it does not need to shuffle 64K pages or copy things in and out of the bottom 640K of memory. Microsoft programs are crippled and complicated by this 'compatibility', but there's no way to fix the PC architecture now, without throwing out the 'standard' software and starting again – as Amiga Inc did, 16 years ago.

XOpa 1.96 (15.1.2000) by Axel Dorfler and Alexander Bartz

Address	Pri	Stack	Signals	State	Code	Type	Name
083FD708	1	2048	E0000000	wait	ET--	task	dopus_hotkeez
08559250	0	8192	C0008000	wait	ET--	process	FC 2.0 Process
08580FA0	0	8192	C0008000	wait	ET--	process	FC 2.0 Process
08185E90	5	4096	FFC00001	wait	ET--	task	fd.device,0
081810C0	8	16000	00000100	wait	ET--	process	FD0
08212A10	5	4000	00000100	wait	ET--	process	FLAT
08380D38	0	32768	50001000	wait	ET--	process	FreeWheel
0803A4E8	10	2400	40000100	wait	ET--	process	IDH0
08103118	10	2400	40000100	wait	ET--	process	IDH1
0800CC4A	20	4096	C0000000	wait	ET--	task	input.device
08450A68	5	4096	60000100	wait	ET--	process	KCON
08451B58	5	4000	80000000	wait	ET--	process	KingCON DOS-process
082292B0	5	2000	00000100	wait	ET--	process	MACW0
0822AA80	5	6000	60000100	wait	ET--	process	MACW0xx
08427F90	0	4096	80001000	wait	ET--	process	Magic Layers
0830C220	0	1800	80001000	wait	ET--	process	magiccolors

input.device

Add | Remove | Signal | Priority | Close | Freeze | Window | Back
Tasks | Screens | Ports | Libraries | Resources | Devices
System | Interrupts | Assigns | Residents | Fonts | Structure

The high priority of input.device assures prompt reactions.

Xoper 2.8 (16.5.99) © 1988/99 by W Günther and G.Nikl – <PopK

CPU:68060/68882 CPU activity: 100.0%
Dispat/Sec:208.0 I/O Ints/Sec: 28.3

ID	TYPE	STATE	PRI	CPUSE	NUM	TASKNAME
080da6f8	Process	Running	0	32.3%	---	Xoper
0800cc4a	Task	Waiting	20	2.5%	---	input.device
08010f28	Task	Waiting	5	0.0%	---	console.device
080115a8	Task	Waiting	11	0.0%	---	scsi.device
08011720	Task	Waiting	12	0.6%	---	A4091 SCSI handle
08014dcc	Task	Waiting	5	0.0%	---	trackdisk.device
080165d8	Process	Waiting	10	0.0%	---	SDH0 {SDH0:}
0802c630	Process	Waiting	10	0.0%	---	DF0 {DF0:}
0802eaf8	Process	Waiting	10	0.0%	---	SDH3 {SDH3:}
080348f0	Process	Waiting	10	0.0%	---	SDH9 {SDH9:}
0803a4e8	Process	Waiting	10	0.0%	---	IDH0 {IDH0:}
08040108	Process	Waiting	10	0.0%	---	DF2 {DF2:}
080425d4	Task	Waiting	5	0.0%	---	trackdisk.device
08042848	Process	Waiting	10	0.0%	---	SDH1 {SDH1:}
0804b198	Process	Waiting	10	0.0%	---	SDH2 {SDH2:}
08062a10	Process	Waiting	10	0.0%	---	SDH4 {SDH4:}
0809f398	Process	Waiting	10	0.0%	---	SDH5 {SDH5:}

Xoper shows how much time tasks get and how many times the scheduler runs each second.

TRADE-OFFS

AmigaOS was designed in 1984 and some of those decisions limit it today. Messages are passed by sharing memory between processes. This is extremely efficient, because nothing needs to be copied, but potentially risky because there's no potential for 'protection' between tasks. Any task can access any other, and there's no way hardware memory management can arbitrate between them.

Unix and QNX are more secure, though slower, because the system copies information between tasks, rather than addresses. This also makes them far more suitable for networking and multi-processor applications. The Tao operating system Elate adds an extra translation stage, mapping virtual instructions onto the processor of the moment. This is clever stuff, and may be where the computer world is heading, but the AmigaOS concepts offer unrivalled efficiency on a single desktop micro.

PRIORITY TREATMENT

The limitation of a simple priority scheme is that it relies on processes politely giving up control at regular intervals. This is adequate for programs that perform regular input and output – they naturally have to wait on other devices – but no good for number-crunchers and rendering routines, which might grind away for hours without letting rival applications get a look in.

One way to ensure other tasks get a fair crack of the whip is to periodically 'pre-empt' the current one, suspending it to allow others at the same priority to get a look in. This is how AmigaOS tames tasks that would otherwise hog the system.

You can adjust how often this pre-emption occurs by setting the 'Quantum' – the maximum amount of time a task can run before the scheduler intervenes. A convenient interrupt signal comes along fifty or sixty times a second, as each new display 'frame' is started.

By default the scheduler retires the current task if it's still running after four of these interrupts, and moves on to the next task in the list at that priority. This is called round-robin scheduling.

JARGON BUSTERS

BUSY-WAITING
Soaking up all available CPU time without giving way to other tasks.

CO-OPERATIVE
Built around components working together, rather than competing aggressively.

DEADLOCK
The tricky situation when one task can't start till another has finished, but that one is itself waiting for the first – resulting in paralysis.

DEVICE
External hardware, or an associated 'device driver' program which gives the rest of the system control over hardware in a standardised way.

EVENT
Something that happens which may affect the sequence in which tasks run – typically the arrival of a signal, interrupt or message.

HANDLER
A program that interprets data from a device on behalf of applications. For example, one disk device could be shared by handlers for AmigaDOS and MS-DOS directory structures.

INTERRUPT
An indication from a program or another part of the computer that something significant has happened, requiring a quick response.

LATENCY
The delay between when an activity could start and when it actually does.

MESSAGE
A collection of data bytes sent from one specific task or interrupt to another. Message Ports record any number of messages in the order in which they reach a given task.

MULTITASKING
Sharing processor time between several programs so that they appear to be running all at once – which is a good thing.

POLLING
Repeatedly performing a test on the off chance that something might possibly have changed.

PRE-EMPTION
Automatic interruption of a task that has run as long as can be allowed without jeopardising the illusion of programs running simultaneously.

PRIORITY RESULTS

Time to copy Workbench 2.1 from Fake Floppy to hard drive at various priorities.

LhA priority	RamLib priority	Time
0	0	28s
0	25	27s
25	0	24s
25	25	23s

Quantum, on *AFCD52*, lets you adjust the 'time-slice' between task swaps. *Quantum 1* gives smoothest multitasking, but spends more time switching between tasks – this overhead may be noticeable on slow Amigas. *Quantum 8* swaps half as often as usual, giving each task more time at the expense of choppier response. Kickstart 1 had a bug that meant that interrupts caused re-scheduling before the full time elapsed, so the *Quantum* is only worth tweaking on Kickstart 2 or 3.

QUIET LHA COMPRESSION

Time to compress 665 files, without any reporting.

Priority	AmigaOS	Executive
0	65s	64s
4	60s	62s
19	60s	62s

PRIORITY PERILS

As this feature was being planned reader Bruce Steers sent us an interesting question about multitasking. His experience vividly illustrates the pros and cons of fiddling with task priorities.

Bruce found that setting tasks like *LhA*, *ProNet* and *ParNet* to a priority of 25 or more sped them up considerably. But if he wanted to multitask and use the Workbench he had to set input.device priority above 25 to stop the mouse from getting stuck. He also found that raising the RamLib priority added a little speed.

The Priority Results table shows the effect of priority tweaks on tests using the *LhA* archiver. Bruce copied Workbench 2.1 to a fake floppy (FF0:) then archived it to his hard drive under various conditions. Five seconds may not seem like a lot, he said, but when it comes to backing up his 40M Workbench with *LhA* it really counts.

This would be fine, except that the difference was not all good news. Bruce concluded: "Unfortunately sometimes things go a bit wrong. The whole system just freezes and I have to reset. Are there certain guidelines I should follow to avoid these crashes as ChangeTaskPri is a Workbench command so you'd think it was safe to experiment with?"

NOISY LHA COMPRESSION

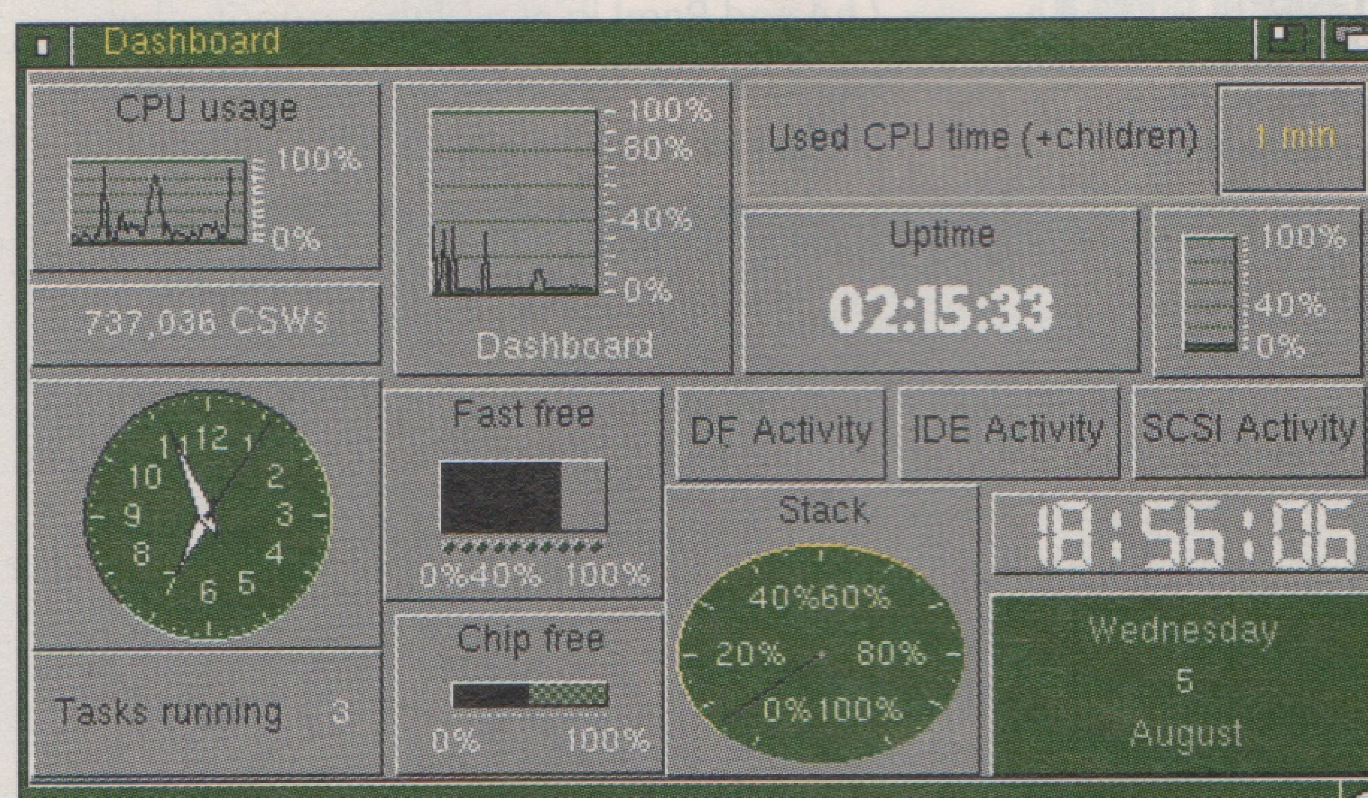
Time to compress 665 files, reporting to the Shell.

Priority	AmigaOS	Executive
0	85s	84s
4	79s	81s
19	79s	81s

APT RESPONSE

My first reaction was to observe that Delete is a standard command and it's certainly dangerous! The Amiga depends on a hierarchy of task priorities, and freezes are indeed likely if you change them willy-nilly.

I suspect that the adjustment to RamLib is not significant, and the one-unit timing difference relates to experimental variation. There are so many things going on that variations of a few per cent should be expected, and might not signify anything.



Executive's Dashboard provides loads of information about task activity.

RamLib was a resident library in Kickstart 1, and has since become a process. It loads libraries for Exec via AmigaDOS if they're not resident, and adds a form of garbage collection to the Amiga's memory allocator. It should not consume much processor time, because all the operations it performs are one-off calls to other system components.

In fact timings depend very much on the Amiga system, its processor and the other programs in use. The more programs you have ready, the more time the system spends sifting through them. If they're mostly idle and you've got a fast processor the overhead is slight, but more noticeable on a 68000 system.

RELATIVITY

The first thing to realise is that the absolute value of a priority is meaningless – it's only important in so far as it's higher or lower than that of other tasks. A task gets the same amount of time whether it has priority 21 or 127, if the highest priority of any other task on the system is 20.

This is a big difference from other systems like Qdos or the original Linux scheduler, where the priority determines the proportion of time a task gets. Higher priority tasks get **all** the time on an Amiga, until they wait, explicitly giving up the processor, or another task at the same priority takes a turn.

Bruce did not list the other tasks on his system, but I guess that he had at least one that was waking up periodically at priority zero or above, and reducing the amount of time available to *LhA* and RamLib. Some removable devices lack a 'disk change' signal, so they must be polled periodically in case the medium has been swapped without warning. Hacks like *CopperDaemon* are similarly twitchy as they check on the current screens in case the Copper List needs changes.

EXIT POLLING

In general polling is a bad thing. At worst it can tie the computer up completely in a most un-Amiga-like manner, and at best it wastes time swapping between tasks when

Continued overleaf ➡

PRIORITY
A whole number between -128 and +127, determining the order in which the Amiga stores things and finds them when it looks through those lists. Highest priority items are at the top of the list, where they will be found first.

PROCESSOR
The chip (or chips) in your computer that interpret the tasks and scheduler instructions.

PROCESS
A task with extra properties that allow it to send input and output to AmigaDOS devices in standard ways.

QUANTUM
The longest interval of time when a task can run continuously without interruption from the scheduler.

READY
A program that is not currently using the processor but has nothing it needs to wait for before it can start running.

REAL-TIME
A system that does not keep the user waiting – the acid test of a real-time system is the slowest it might ever respond, not the quickest.

RUNNING
A program that is currently using the processor.

SCHEDULER
The master program that determines which tasks run, and when. The scheduler starts when a task waits for an event or exhausts its Quantum.

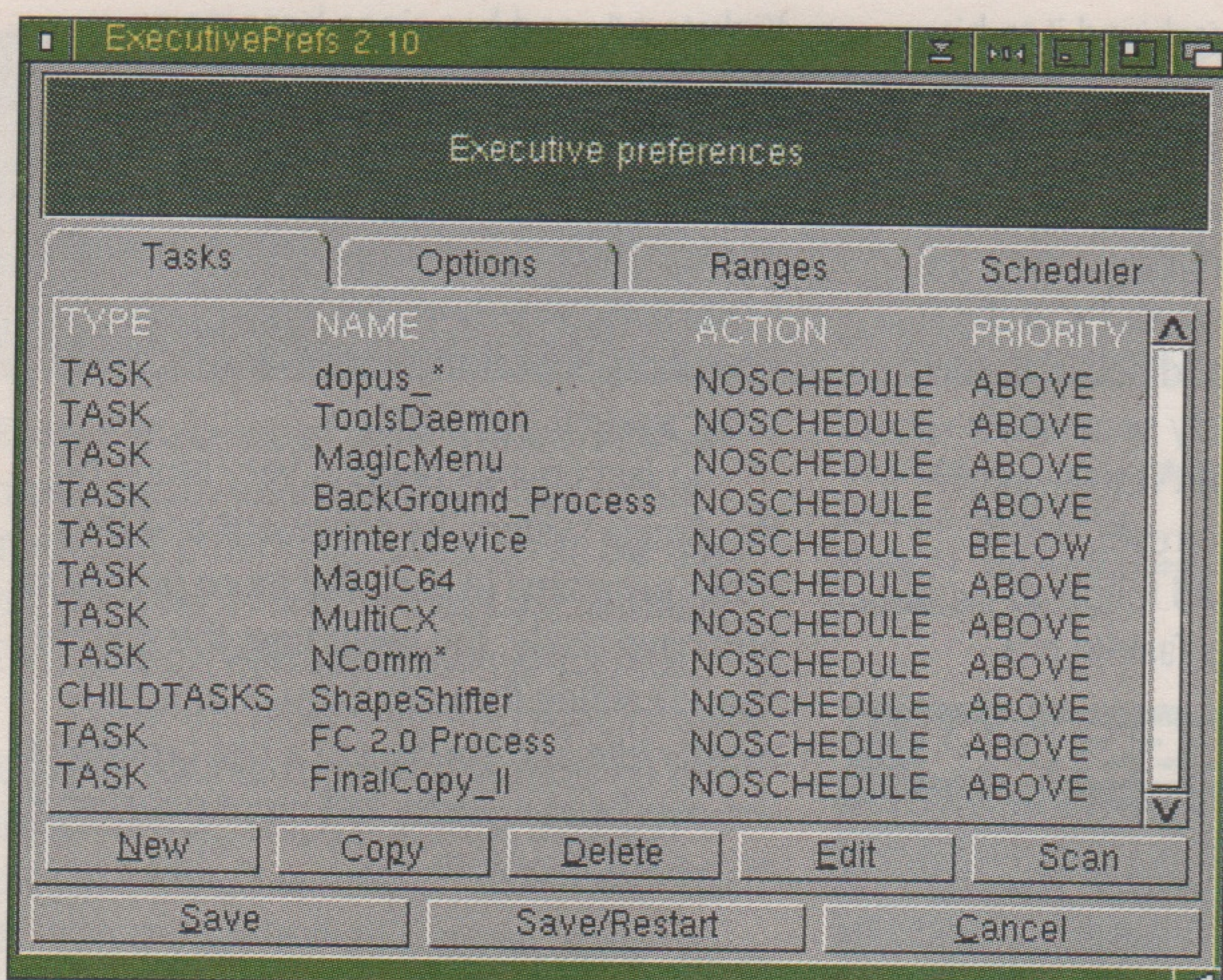
SIGNAL
A quick, single-bit indication that an event has occurred

SLEEPING
A program that is waiting for an event that will make it ready to run.

TASK
A program that's in memory, ready for the processor to run it when the scheduler determines that it's ready.

TIME-SLICE
A short interval of time when a task can run continuously without interruption from other tasks, unless it opts to wait before the time is up.

WAITING
A program that is temporarily dormant until some event occurs – another term for sleeping.



Preferences can stop the Executive scheduler messing up sensitive tasks.

there's probably nothing for the polling task to do.

In practice polling is acceptable as long as it's infrequent and defers to more urgent

> **When you are tuning tasks for speed, it's not how you do it, it's what you do that really counts**

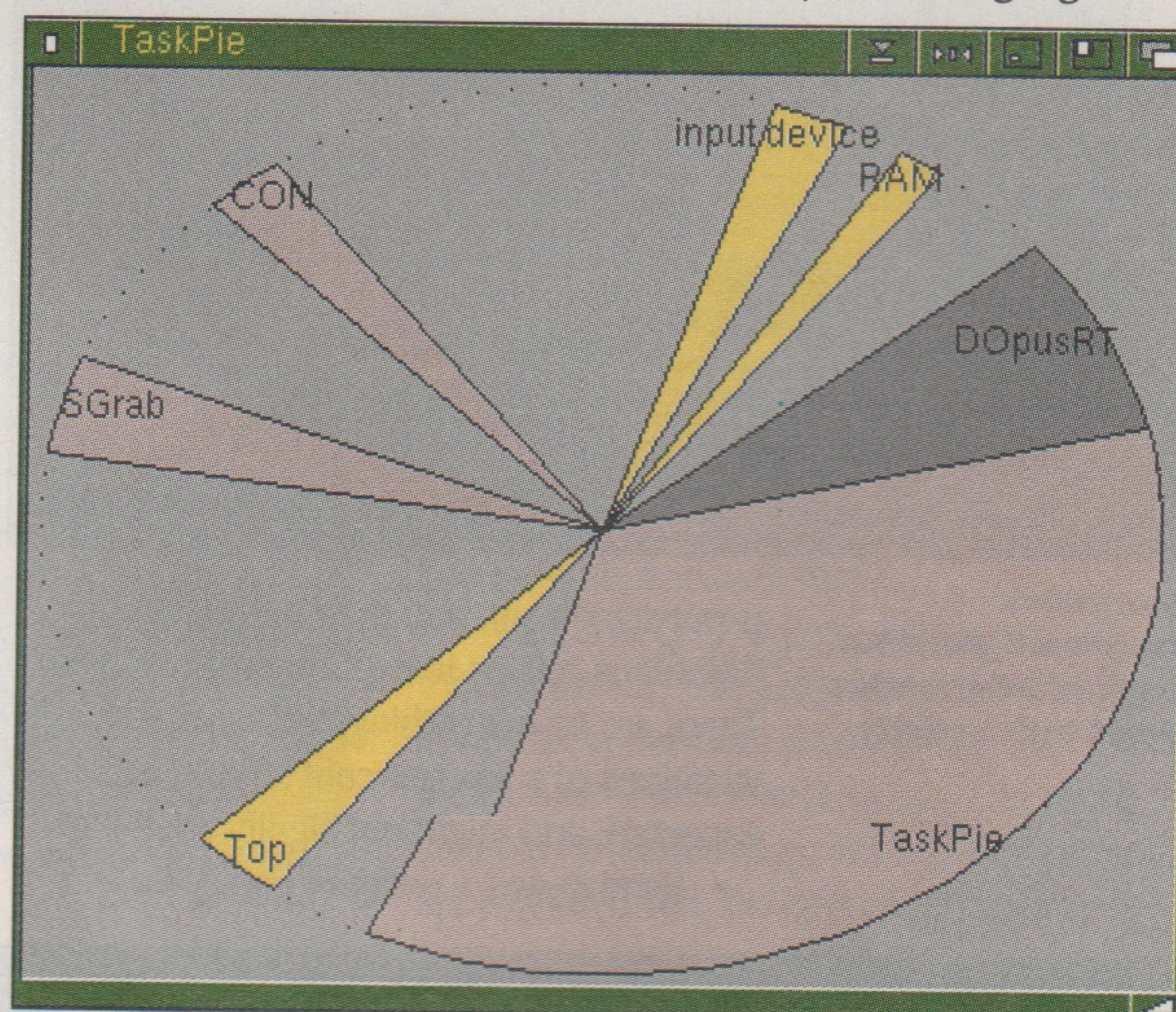
tasks. Frequent high priority polling is unacceptable because it stops multitasking.

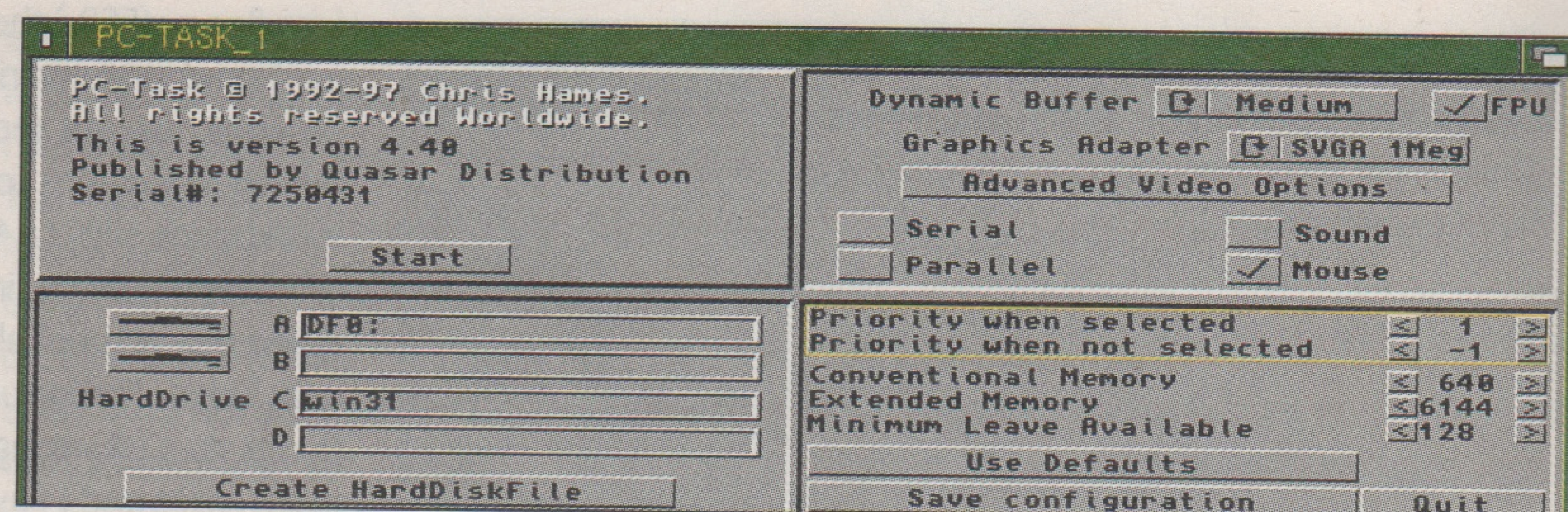
Normally the highest priority task on the Amiga is input.device, because this supervises interaction with the user. Mouse and keyboard input demand prompt acknowledgement, so input.device runs at a high priority of +20.

The only things that might run at higher priorities are programs or hacks that aim to modify the effect of input – for instance ClickToFront has to respond quickly as its job is to reselect windows. It must run before input.device so it can divert control signals if necessary before input.device routes them elsewhere. Tasks like this spend almost all their time waiting – as does input.device, unless the mouse or keys are active – and wake momentarily before going straight back to sleep after handling the signal they're waiting for.

The input.device task also updates GadTools (but not MUI) gadgets when input events affect them, which is another reason

TaskPie gives a dynamic pie chart of Executive scheduling.





PC Task adjusts its own priority as you select it.

why Amiga systems feel so responsive – it might be a while before the application get the message that the gadget has been changed, but the display responds at once.

MUI displays may seem relatively sluggish because – like PC and Mac gadgets – the imagery is only updated after the message has reached the application. While this confirms that the application is paying attention, it still doesn't mean that the job has been done. File input and output usually require the attention of other tasks, for example.

The GadTools approach has a lot to commend it, but such responsiveness must be built into the system, not tacked on as an afterthought. Until the system is heavily loaded it may be hard to tell the difference, as modern Amigas can swap between tasks hundreds of times a second.

Bruce ran into trouble when he put *LhA* and RamLib at a higher priority than input.device, because that allowed those programs to block input. You might get away with this if higher-priority tasks periodically take a break, waiting for drives or other devices, but generally it's a recipe for deadlock.

FIDDLING

It can be worthwhile to fiddle with priorities, especially on small or busy Amigas, but you have to know what you're doing, and make caution your watchword. The first thing is to find out what tasks are actually running. If you've got a few application running and a handful of icons in WBStartup there may be dozens of tasks competing for your processor time.

Programs like *Scout, Spy, ARTM* and *Xoper* list tasks in various formats, as discussed in part seven of my Under the Bonnet tutorial. Most of them also let you change task priorities. It's safest to concentrate your attention on tasks with the default priority of zero. Lower priority tasks are unlikely to soak up much time, and higher priority ones are normally set that way for a reason; they can be almost guaranteed not to busy-wait, or they'd block response from standard applications. *Xoper* helps you home in on busy tasks by showing the proportion of CPU time each one gets. Whizz the mouse around frantically, and see how input.device demands extra time. The *SpySystem TopCPU* tool graphs busy tasks in order of activity. Bear in mind that these monitor programs are CPU-hogs in their own right, as they constantly update their displays.

GREEDY TASKS

Heavy-duty emulators often gobble all the time they can get, so titles like *ShapeShifter, Speculator* and *PCx* benefit from a small negative priority, especially if you've got them in the background, rather than on the frontmost screen where your interaction is centred. Chris Hames' *PC Task* neatly adjusts its priority depending on whether or not it is selected. The default priority is +1 when it's the frontmost screen, so it dominates other applications in typical PC fashion, and -1 when it's in the background, only consuming time that other applications don't need.

Programs like *Angie* and *SteamyWindows*, on Aminet and *AFCD53*, have a similar effect on other tasks. They boost the priority of the process associated with the active window, and drop it back when you select another. This helps to make the system more responsive.

For similar reasons, you should run processor-intensive 3D generators at a priority of -1; otherwise they'll slow down

AMIGAS AND RIVALS

The Amiga is essentially a real-time co-operative system, and these two attributes mark it out from Windoze, Mac and Unix boxes. Amiga programs, and other gadgets, real and virtual, share the system and share one another. They are written with this in mind, whereas Mac applications are written to take turns on a single thread laced between programs, and PC and Unix titles compete aggressively, with an authoritarian system holding them at arm's length.

The Amiga is a software standard just as much as a hardware standard. There is a 'device independent' interface to floppy drives, SCSI and IDE drives, printers, modems, memory, networks, trackballs, pens, scanners and just about anything else you can think of.

If you get a new program, it works with all the existing devices. If you get a new device, it comes with code, often autoconfigured via Zorro, that makes it work with all your software and hardware. Sometimes you can get new 'devices' to do more with your existing hardware, like Photo CD, Mac and PC disk handlers. These are isolated from the hardware so they work with SCSI, IDE, or even the Commodore/Sony hybrid in a CD32.

Compare this with typical PC audio cards that can play or record, but not both at the same time, spooning data bytewise for 1981 XT compatibility, with software on disk that may not work at all if you plug in more than one at a time. They come with programs that will multitask, sort of, grudgingly, with simpler ones, but lock up if you try to use two copies of the same thing.

rival applications. Rendering programs rarely wait for anything else, so its better to give them time the other applications can't use, rather than vice versa. As soon as you leave the machine alone they'll get the lion's share of the time, anyway, even with a small negative priority. The ultimate hack along these lines is *Executive*, a replacement scheduler for Amiga tasks.

The acid test of real-time systems is their slowest response, rather than their quickest response

Opinions differ about its usefulness; Elbox recommend it to Power Flyer users, because it stops the Flyer hogging all the processor time during IDE transfers. Serious multitrackers think otherwise, reporting nasty problems with *Samplitude, PowerUp* and *Bars and Pipes* which vanish as soon as they uninstall *Executive*.

Executive gives the Amiga dynamic priorities, rather like Unix systems. The priority of each task is adjusted as it runs – restraining programs that churn for ages without performing input or output – reducing the risk that greedy tasks will hog the entire system.

Some people swear by it, and it certainly has some neat reporting options, but there's more than enough rope to hang yourself if you fiddle with the defaults without reading the 313K guide carefully.

CUTTING TIME

The general trick is to bump up the priority of any task you can't afford to wait for, and drop the priority of tasks that are soaking up time at the expense of interactive performance. Just as when mixing tracks, or balancing pitches with a graphic equaliser, cutting is often more effective and gives more control than boosting. If you turn everything up to 11 you gain nothing but an earlier headache.

The task list can be quite daunting on a heavily-customised Amiga, even if you focus on things initially at priority zero. It may help to reboot, skipping user-startup, DOSDrivers and WBstartup items, to sort the wheat from the chaff.

To do this, you have to rename the WBStartup or Devs:DOSDrivers drawers temporarily from Workbench; if that still leaves a lot of mystery tasks after a reset, open a shell and type `Rename s:user-startup s:user-startup.old` then reboot. Restore the original file names when you want your full configuration back.

```
Ram Disk:
13> status full
Process  1: stk  4000, gv 150, pri   2 Loaded as command: ToolsDaemon
Process  2: stk  4096, gv 150, pri   0 Loaded as command: c:sushi
Process  3: stk  4096, gv 150, pri   0 Loaded as command: c:noide
Process  4: stk  4096, gv 150, pri   0 Loaded as command: c:FBlit
Process  5: stk  4096, gv 150, pri -53 Loaded as command: c:ShellTitle
Process  6: stk  4096, gv 150, pri   0 Loaded as command: c:SetDevice
Process  7: stk  4096, gv 150, pri  20 Loaded as command: c:PowerMouse
Process  8: stk  4096, gv 150, pri   0 Loaded as command: c:MuiWheelPatch
Process  9: stk  6000, gv 150, pri   1 Loaded as command: Workbench
Process 10: stk  4096, gv 150, pri   0 Loaded as command: MagicFrames
Process 12: stk  4000, gv 150, pri   5 Loaded as command: PowerSnap-handler
Process 13: stk 60000, gv 150, pri  13 Loaded as command: status
Process 14: stk  4096, gv 150, pri 126 Loaded as command: Executive
13>
```

The obscure command Status reports on active Shell tasks.

FINE ADJUSTMENTS

The other tables summarise my experiments with *Executive* and the Amiga scheduler. I ran *LhA* from a Shell to compress a directory containing 655 files from 4,234,050 to 2,149,898 bytes. This took my A4000/060 over a minute, while running *Xoper 2.8, Final Copy IIB, KingCON* and *Directory Opus 4*, plus another eighty tasks dozing in the background. The results were more a tribute to well-tuned AmigaOS than to the alternative scheduler.

Executive was slightly faster than the default, but slower when I tuned the system to run *LhA* at a higher priority, using the command `ChangeTaskPri`. You can do this from Workbench with *ARTM*, by pointing at the task in a list.

Adjusting the priority of the current shell also affects tasks it starts. *LhA* has its own priority option, -P, which only affects the compression task. Raising the Shell priority helped a bit, but there was no measurable difference between running *LhA* and the Shell at a priority of 4 and 19. I stayed below 20 to avoid upsetting input.device.

Executive is most useful when running badly-behaved tasks. If your applications are not hogging the system, it won't help and might even make things slightly worse, because it adds overhead every time tasks are swapped.

I managed to shave another second off the timings by exiting *Xoper* – but all the differences were trivial compared with the benefit from adding -q to the *LhA* options, shown in the third table. This 'quiet' mode inhibits the continuous list of filenames and compression factors in the shell window, which otherwise took up about a quarter of the total compression time.

There's no magic way to summon up extra CPU time. In this case, it's not how you do it, it's what you do.

Simon Goodwin 



AF47 (June 93) – The first RTG graphics card (Retina) gets reviewed.

```
Xoper 2.8 (16.5.99) © 1988/99 by W.Günther and G.Nikl - <PopKey=lcommand rcommand x>
DISPLAY:
[T]asks    task[F]lags [L]ibraries  [D]evices    [R]esources
r[E]sident [M]emory    [P]orts      [I]nterrupts [S]tack
[C]litasks task[U]sage sem[A]phores [Q]uit

OTHER SYSTEM LISTS:
Windows  Screens  PubScreens  WindowFonts   Fonts
Capture  TimerIO  DiskChange  InputHandler  Devices
Locks    Files    CurrentDir  LowMemHandler Frags

COMMANDS:
Time         <secs>
Mypri        <priority>
Taskpri      <priority>  [processnum] <taskname>
Signal       <mask(hex)> [processnum] <taskname>
Break        [processnum] <taskname>
Freeze|Warm  [processnum] <taskname>
Kill/Cancel  [processnum] <taskname>
SnoopMem     [processnum] <taskname>
TraceOpen/TraceLock
ZeroTimer    [processnum] <taskname>

TASKPRI 19 13 Shell process
```

Xoper has an internal Shell for task control commands.

Screen Play

SCREENPLAY INDEX

You've no idea how difficult it is to avoid cliché when saying goodbye to *Amiga Format* and you readers, because it really is true that I've enjoyed my time here immensely, will miss *AF* dearly and remember it fondly. So take care of yourselves, won't you?

It's a shame then, that the two games that fate decided would be the last to be reviewed in *Amiga Format* failed to inspire me much.

It's true that *Tales From Heaven* is a first, and an achievement of sorts, but graphically it just doesn't cut the mustard. *Bertie's Animal Kingdom* will probably have more appeal to children than it does to depressed game reviewers but it does have its limitations, as you'll see from the review.

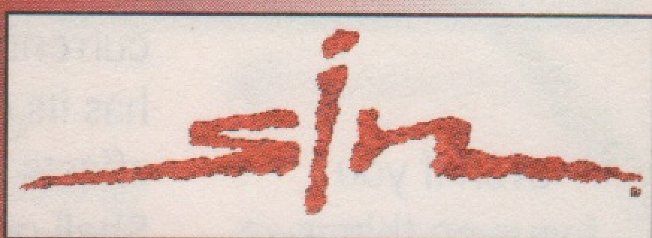
I'm sure that games like *Nightlong, Hellsquad, Worms Armageddon* and now *SiN* will be well worth the wait, it's just a shame that *AF* won't be able to bring you the reviews. So, to cheer myself up, I took a trip down memory lane with my favourite ever Amiga games, which has left me itching for a go on some of those classics. Chin chin!

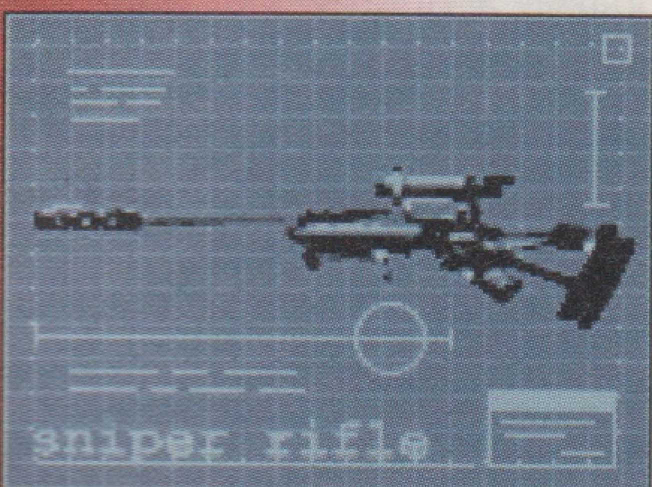
Paul Cavanagh

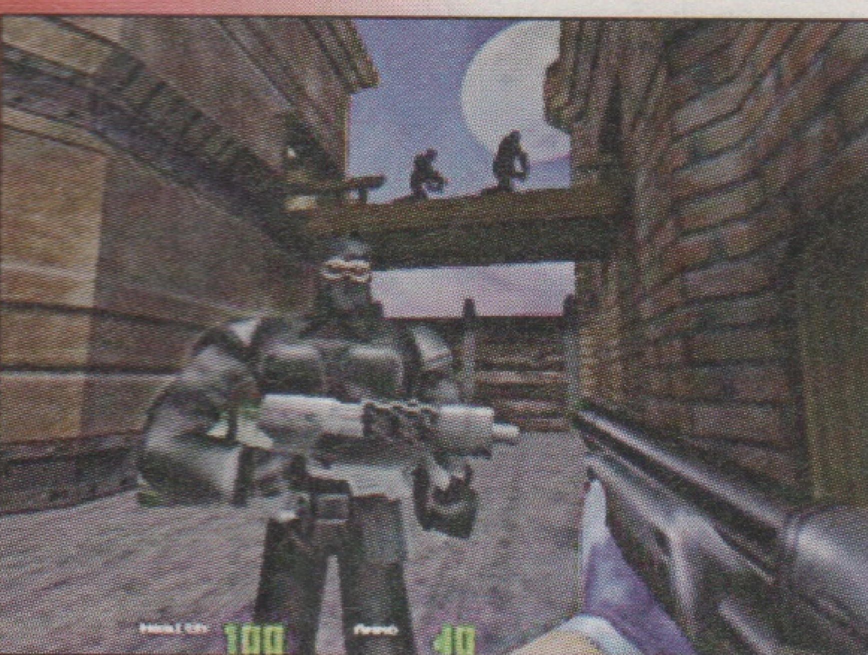
Previews

This month Previews includes a bit of games news, a competition and a round up of forthcoming titles

SiN







Hyperion are a busy bunch these days. Now that they've got *Heretic II* under their belt, they've added *SiN* to their list of games for conversion, along with *Shogo* and *Worms Armageddon*.

Set in the fictional city of Freeport in 2027, the player assumes the role of John Blade, the leader of HARDCORPS, a sort of private police force. Blade's mission is to discover where an addictive drug is being produced.

Utilizing the converted *Quake II* engine, and Hyperion's mini GL, *SiN* will more than likely match the PC version in its use of high quality 3D graphics techniques. So expect to see environments such as construction sites, a power station, underwater caves and a dam. These will feature advanced coloured lighting, and a variety of textures such as translucent windows and water. There will be music that will change with





Mean-looking Jungle fellers give more than hard stares

the action, weapons that include a sniper rifle with long range sights, and the opportunity to creep through levels unnoticed rather than get involved in full-on battles.

If you fancy a ruck or get caught out sneaking about you'll be in for a treat with the enemy AI – these guys will run away to heal themselves and come back for more later. All this along with a multiplayer deathmatch option, and multiple routes through the game.

Hyperion are hoping that they'll be able to get the game ported by the middle of this year. You can find details at http://www.hyperion-software.com and at http://www.ritual.com/sin.

Maim & Mangle

MAIM AND MANGLE



M&M's 3D effects will be far more spectacular under MiniGL.

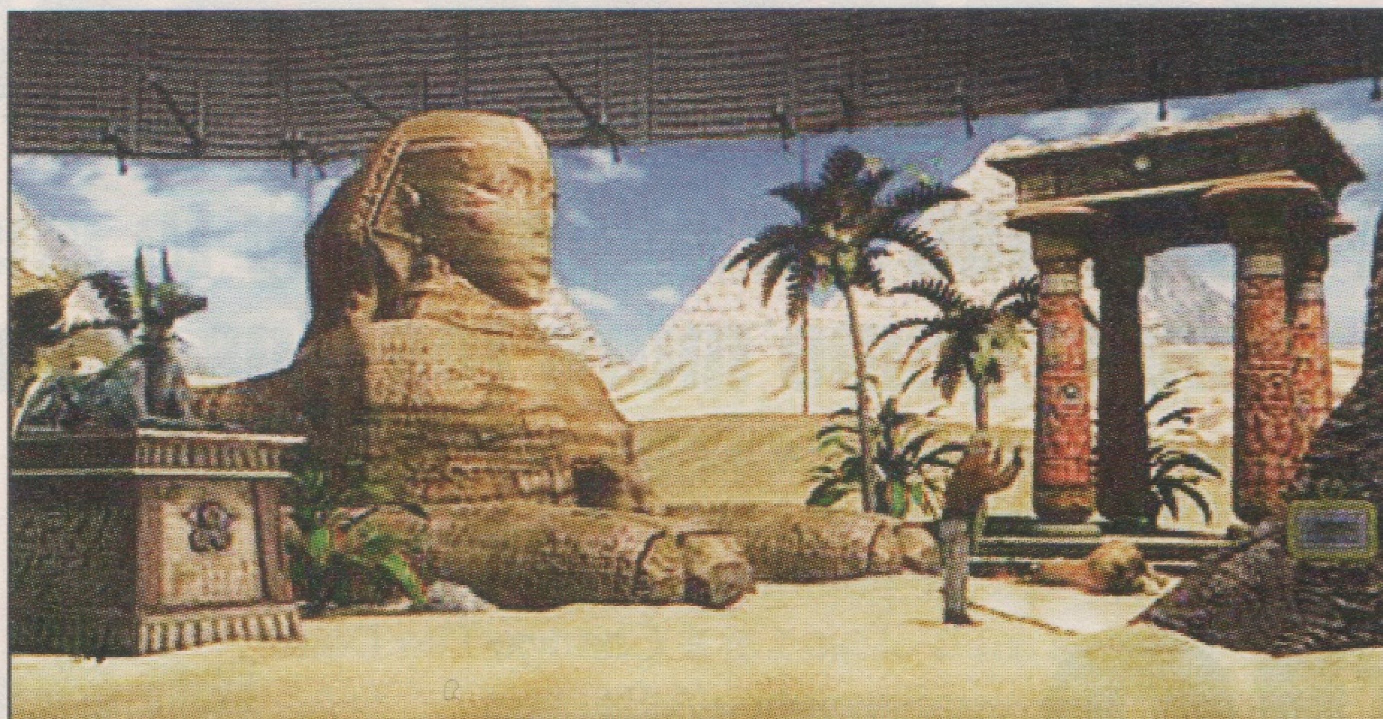
The latest on World Foundry's real time combat/strategy game is that it will now be utilising Hyperion's miniGL system, thus enabling a true 3D environment to be implemented through 3D graphics accelerators. So if your Amiga is suitably equipped everything in the game – buildings, landscape, vehicles – will be represented in glorious 3D. You'll be able to hide behind hills, vehicles will go slower up hills etc. In addition, miniGL will allow World Foundry to make more use of light-sourcing effects, so that explosions will light up the surrounding area. This, in turn, will allow for night-time conflict with flares, searchlights, vehicle headlights and even infantry troops using torches. Keep up with the latest news at http://www.worldfoundry.com.

Nightlong Competition



Nightlong looks as though it will be one of the biggest games this year for a number of reasons. For a start there's clickBOOM's reputation for releasing only very polished and playable titles. Then there's the fact that *Nightlong* will keep you going for ages, since it will be supplied on three CDs.

The screenshots that I've seen have been of superb quality, giving out a sense of dark, cyberpunky mystery and action. Because of all this I see no reason to doubt that you'll be wanting a copy as soon as it's released. Luckily FORE-MATT Home Computing are giving you the chance to win a copy in their clickBOOM competition. All you have to do is answer the following question:



An India Jones style section? Pharaoh 'nuff.

Which former Amiga team first brought out *Nightlong* on the PC? The seventeenth correct answer to come out of the hat will win a copy of *Nightlong*. The second prize winner will receive a copy of the official Amiga *Quake*, while the third prize will be the classic clickBOOM game *Capital Punishment*.

Entries should be sent to nightlong@forematt.idps.co.uk or Nightlong Competition, FORE-MATT Home Computing, PO Box 835, Wooton Bassett, Swindon SN4 8RX. The closing date is June 17th 2000.

Chessmania

Xteam Software are developing a new chess game for the Amiga. There will be an inbuilt tutor for novices as well as advanced AI that will be able to remember your style of play, and use it against you.

The computer opponent will also be prone to mood changes, so you could catch it on a bad day and really wind it up. There's a story mode involving eight characters, beat them to discover more of the plot.

While chess may not be new, or particularly fast, I find it can be very involving, and I feel rather smug when I win, which is infrequently.

The graphics here look great, so let's hope that the AI is up to scratch. For more details, check out the website at www.geocities.com/xteamsoftware



I wonder if it'll be as good as Battle Chess.



Looks like the sort of chess set I've always wanted but never been able to afford.



This woman obviously likes to play chess with a nice picnic.

Games Distribution News

The distribution for the entire range of Islona floppy disk games has now been taken over by FORE-MATT Home Computing, allowing Islona to focus more on CD titles. In addition to this FORE-MATT are have exclusive distribution rights for the Vulcan Mini Series disk games and now owns Virus Free PD.



This means that they have a good number of classic games including *Civilisation, Railroad Tycoon* and *Player Manager 2* Extra, so if reading the games retrospective in this issue whets your appetite get in touch on 01793 853802, or email on sales@forematt.idps.co.uk

Other news is that CS&E have announced that they are planning to start distributing amiga games software via a network of around 4,000 independent computer dealers in the UK. They are also planning to commission two or three new projects every month. At present the only title that they are publishing is *Max Rally*.

Do You CS&E?
www.csande.co.uk

For more information contact CS&E, 7 Glyme Close, Woodstock, Oxon, OX20 1LB or phone 01993 821685. You can find their website at www.csande.co.uk or email them at csande@csande.com.

Paul Cavanagh



GAMEBUSTERS!

Thankfully, we've had the opportunity to answer another reader query, and include some more top tips before we go

Genetic Species

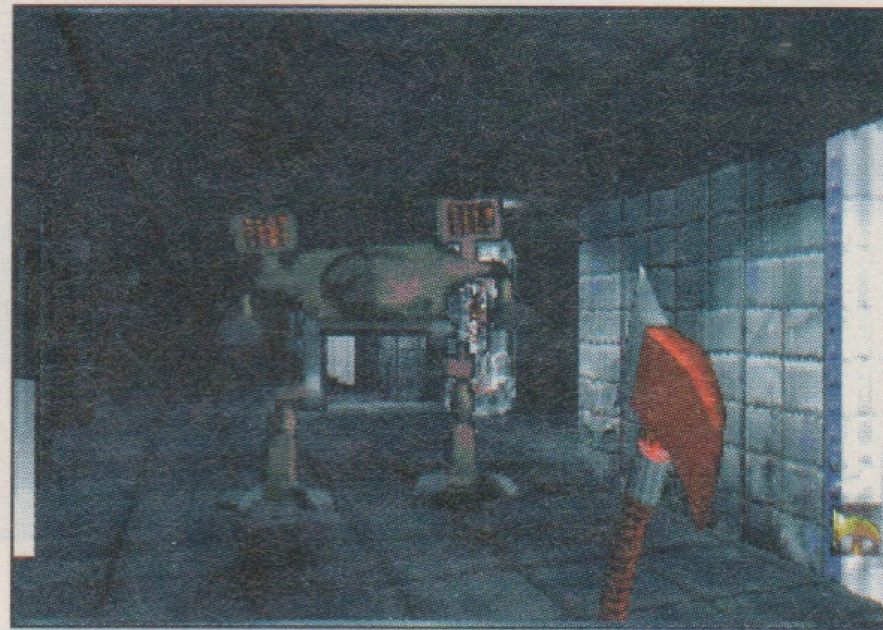
Marble-Eyes Development have released this comprehensive list of cheats for their first person shooter. It's quite an impressive set of cheats don't you think?



AF36 (July 92) – The original Future cock-up "Type some shit in here please" occurs on page 7, The A500+ is cancelled and AF reviews the A600.

FrameCount – Enable FrameCounter.
DangerZone – Maximum Weapon Ammo.
FoxMulder – Maximum Weapon KillPower.
Caffeine – Immortality
FullCircle – Remove Player Shot Collision.
Goldbeer – Disable Artificial Intelligence.
Sober – Enable Artificial Intelligence.
SatanClaus – Remove All Weapon NoiseFactors
Scorpions – Disable Puzzle Board.
AlienRace – Make The Player Invisible To All Enemies.
Fuck You – Surprise!
Chainsaw – Change The Death Sequence A Bit.
JumpingJack – Enable Jumping Bunny Function.
HellRaiser – Reset Weapon Reload Time.
MindFields – Unlock All Doors.
Sissies – Able To Carry Everything.
RushHour – Exstream Enemy Movement Velocity.
Astronomical – Enemies Will Never Retreat.
Elite – Exstream Enemy Shot Rate.
Muppet Show – Set Shade Factor To $D000
Retribution – LevelCode For Stage0
Dysfunctional – LevelCode For Stage1
Antimatter – LevelCode For Stage2
EyeOfTheStorm – LevelCode For Stage3
Ambrosia – LevelCode For Rocket Launcher
Cncd – LevelCode For Plasma Gun
Iris – LevelCode For Flechette
Polka B. – LevelCode For Assault Rifle
Parallax – LevelCode For Mini Gun
SpaceBalls – LevelCode For Flame Thrower
3LE – LevelCode For Tazer
Stellar – LevelCode For Ind. Drill
Puzzle – LevelCode For Stun G. Launcher
Kefrens – LevelCode For Pistol
Impact – LevelCode For Sil. Pistol
Silents – LevelCode For Fire Axe
Scoopex – LevelCode For Aut. Pistol
Deathrow – LevelCode For Hugger Acid
Loonies – LevelCode For Laser Mine
Impulse – LevelCode For Mantis Beam
Depth – LevelCode For Laser Rifle
Floppy – LevelCode For Hand Grenade
Gods – LevelCode For Poopie
Artwork – LevelCode For Data Disc
Rage – LevelCode For Violet Keycard
C-Lous – LevelCode For Red Keycard
Subacid – LevelCode For Green Keycard
Balance – LevelCode For Blue Keycard
Efreet – LevelCode For Bio Toxin
TBL – LevelCode For Save Game
VirtualDreams – LevelCode For Orange Keycard



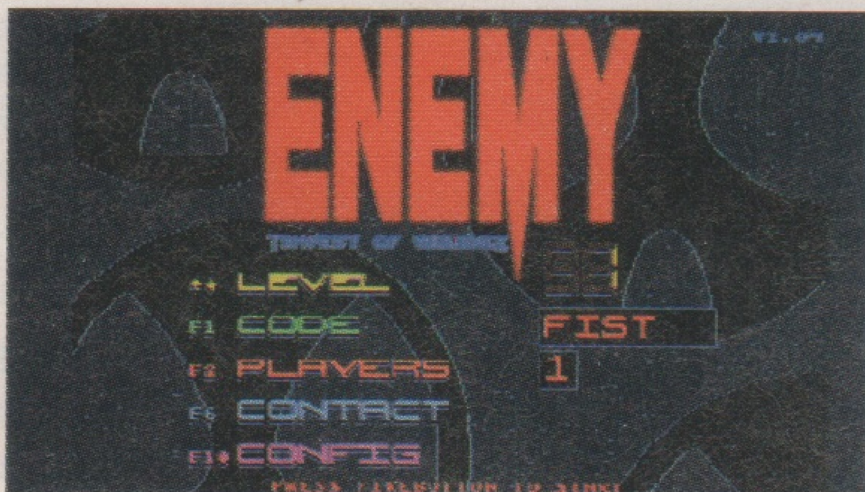


No need to run away, just type AlienRace and taunt him while you're invisible.

Enemy

Erik Hesketh knows his *Enemy*. He'd already sent us the level codes up to level 29, and now here are the rest.

30 Shell
31 Beast
32 Storm
33 Cold
34 Fist



Put your fist in to get to the final level.

Erik also sent us a hint for a the shareware game *Sharks AGA* – it was on *AFCD51*. Repeatedly pressing the green button on a CD32 pad will give you extra points, thus increasing your level. You do, however pay the price because you'll lose a life.



Funny old world isn't it? If you don't get eaten by a shark, you use a life by cheating.

OnEscapee

In the last issue, Sean Musson wanted to know how to complete the city level of *OnEscapee*. Lucky for him, Sascha Brandt from Ancor Productions has emailed me with the solution. It's not quite as simple as punching in a number, Sean. There are seven or eight switches in the level and you need to switch them all. You might want to make a map on paper, so you can be sure you get the lot. When you've done that, you'll find the code for the doors written on a plate outside of the nightclub.

Foundation

Here's a few tips from the extensive *Foundation* hints guide v2.0 by Kenji Irie. You can download them from: http://www.sneech.freeserve.co.uk/foundation.html

For some reason, people get annoyed when they notice a couple of enemy peasants sneaking away from their buildings

TIPS FOR IMPROVING YOUR GAMEPLAY

1 – Try to keep your people inside a building. If they are outside, they will lose health because they have no food.
2 – Try to keep your population level under control. A population of around 200-250 is likely to be the most efficient level for most circumstances. If you have too many peasants, you will need more food, and more water, and more peasants to get the food and water. Keep the population down and you will find you can comfortably supply everyone with what they need.
3 – Do not overuse the speed-time functions. You can be productive almost all of the time. Speeding up time while you are doing housework enables the enemies to become stronger and faster. Be wary of this feature.
4 – If you are running short of peasants, check your wood levels. If you have enough wood to get by, reduce the number of workers in the foresters' hut to one or two. This will reduce the number of foresters required and you will end up with extra peasants that you can send elsewhere.

BURNING ENEMY BUILDINGS

The main problem with burning down enemy buildings is that the enemy will try to stop you by attacking your players in their territory; if there are enemy knights occupying the enemy buildings in the vicinity, they will normally come out and attack your player.

The wrong way to try to remove enemy buildings is to send in a group of peasants directly to the building you want to destroy. More often than not, all your peasants will be killed by knights or peasants and you will have inflicted very little damage to any buildings. Sometimes you will be lucky and the enemy won't have any spare knights to attack you with.

A better way is to take one or two peasants into the enemy territory, attacking and lighting fires to as many buildings as possible. When your peasants are walking around, it seems easier to run from knights than if you were concentrating on one particular building. It is best to burn several buildings before moving onto the building you want destroyed.

It is normally much easier to burn down buildings that are close to the enemy's territorial line because the knights will not attack your peasants until you are in their territory: you can sneak a peasant across the border, burn a building, and retreat.

The spin-off of burning several buildings at once, is that the enemy wizards can't come and put them all out at once. If you burn as many of the enemy buildings as you can at any one time, the chances are that at least some of them won't be put out, and you will succeed in removing enemy buildings.

TIPS FOR STEALING

If you want to annoy the other players, steal from them. For some reason, people get annoyed when they notice a couple of enemy peasants sneaking away from their buildings. Like the process of burning, try to steal from buildings close to the enemy border to increase the chances of your peasants getting away with the goods unattacked. Also try sending in a whole lot of peasants, taking as much as you can in one hit. This should work if you have people to spare and you are low on resources. Some should make it back.

Paul Cavanagh



If you're going to go marauding into enemy territory, do it right and don't get whipped, eh?



AF46 (May 93) – DMA Design to stop producing Amiga stuff after June.



If you want a happy, well-fed population, don't allow too much breeding.

Bertie's Animal Kingdom

Are your kids monkeying around? Too much horseplay going on? Try this to keep them quiet as lambs

Edutainmnent – silly word, sound idea. If you need to keep the kids happy and entertained, wouldn't it be a great idea if you could give them some solid learning material that they can enjoy? This is the principle that lies behind *Bertie's Animal Kingdom*. Here your children can learn about different types of animals, get to grips with using a mouse (control device, not small furry rodent) and hopefully improve their reading abilities.

Bertie made his first appearance in the *Blockhead* games but has now retired to a life of rustic pleasures. So there's Bertie down on the farm drinking cider with Rosie. Life should be easy. There are problems though. For a start, Bertie needs help identifying the breeds of animals on his farm – maybe it's post-traumatic stress disorder from having watched Billy the Bear being blown to smithereens or something, but poor old Bertie really does need help.

WILD ANIMALS

The next problem is that Bertie seems to have had an invasion of wild animals on his farm. There are giant spiders, lions, rhinos, tigers and all sorts of creatures with big sharp pointy teeth. Fortunately, it won't fall to you or your children to rescue the domestic creatures from these jungle denizens.

The task that the player is presented with is relatively simple at first but gets more complex the longer you go on. The first game involves identifying the animals. You're presented with a picture of an animal and are offered multiple choice answers, written at the bottom of the screen. This doesn't mean your child has to have reading skills to play; you could read the questions and point out where the answers are, and improve reading skills in that way.

If a question is answered correctly, a tick appears, a congratulatory sound plays and it's onto the next question. There is a difficulty setting to determine how many lives the player has, and whether you have a second attempt at the question.



Wave at Bertie! Just make sure you keep your hands away from that dirty great eagle.



AF56 (Feb 94) – Commodore put a cheeky ad up outside Sega headquarters in London parodying their advertising slogan. The ad hoarding has a picture of a CD32 on the right and the wording: "To be this good will take Sega ages".



Surely ducks live in ponds? Not our Henrietta, it seems – Henrietta lives in a yard.

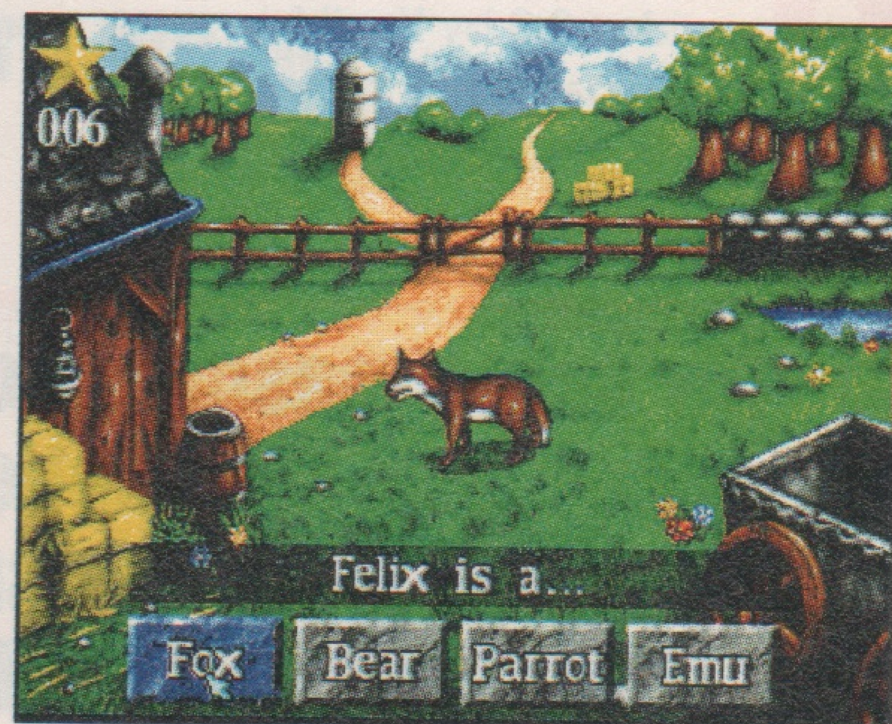




ANIMAL NOISES

After the animal identification game comes a set of questions about what animals sound like, then what they eat and where they live. These can be fairly tricky. For example: do you know what a Rhino sounds like? I found some of the answers a bit dubious – there's an eagle, and what do eagles eat? Grain, it says, not meat. And does a giant spider live in the jungle, the grasslands or the plains? All three I assume, but the correct answer is grasslands. The game becomes more of a memory test than a general knowledge quiz.

This product serves its purpose but that's about all you can say about it; there's very little in the way of polish. The graphics are bright and colourful, and all the animals are identifiable. The problem is that there's not enough fun or variety. The main screen is always the same – a view of the farmyard. And why are all those wild animals in the farm-yard? Surely it would have been better for Bertie to go on a safari holiday?



Apparently Felix is a fox. But Felix is not a fox, he is a cat. Everybody knows that.

There is also next to no animation in the game. It would have been great to have a monkey capering about when you'd properly identified him, have the dog chase a stick and the snake slither away. The only animation you do get is a poor little monkey dejectedly swinging from side to side on the title and end screens, and Bertie gurning and winking at you from time to time – I thought Bertie was a bit scary, actually.

If you want to get your little folk interested in computing then you could stick them in front of this, put their sweet little hands over the mouse and let them get on with it. But if you really want educational fun, I'm afraid you would probably be better off spending your money on a really good pop-up book.

Paul Cavanagh

SUPPLIER: Epic Marketing
TEL: 01793 514188
PRICE: £10
REQUIREMENTS: 2M Chip RAM, CD ROM

Pros and Cons

+ Could be a good introduction to computing.
+ Solid colourful graphics.
- Not enough animation.
- Not enough variety.

OVERALL VERDICT:
A rather insipid and uninspiring game for children. Must try harder, Applaud Software.

58%

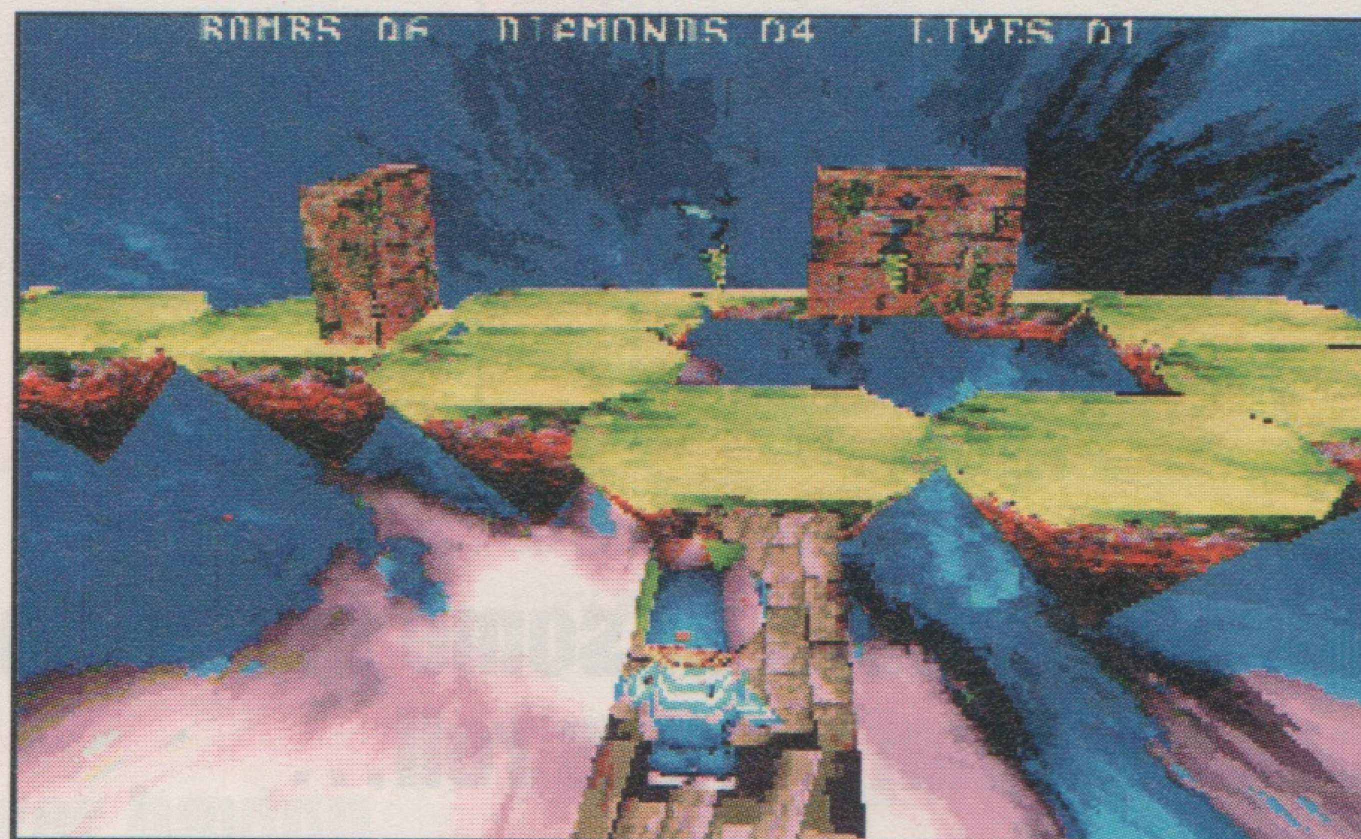
Tales From Heaven

Can this 3D platformer match up to the console titles it's trying to emulate?

Amiga owners have had a long wait to get a true 3D platform game. While the console market has had the likes of *Mario 64*, *Spiro the Dragon* and *Croc*, the Amiga scene has remained starved of such characters. Darkage Software saw the gap in the market and have spent years of hard work crafting *Tales from Heaven*.

What's really quite remarkable is that this game will run on an AGA Amiga, and doesn't require a great deal of processing power. There are two versions of the game on the CD, so if you've got a Retargetable Graphics board, you will be able to use its power to make the game run more smoothly.

However, while I'm immensely impressed that Darkage have managed to provide a perfectly playable game that will run on an A1200 (thus making it accessible to a greater number of people) I've found myself thinking that they should have made this a CGX (and possibly PPC) only game. Why? Well, I'll go into that later.



All the action takes place on floating platforms. There are four worlds, each with four levels.



Can Zaac find the key to the next level?

ZAAC AND HIS CAT

First of all, what's the game all about? You control this little boy by the name of Zaac, who's lost his poor little kitten. There's a daft plot concerning how said moggie got to be wearing an ignition key for a super-weapon around his neck and was consequently swiped by weird aliens who are involved in a war. None of this, however, has any real bearing on the game, the objective of which is pretty simple throughout; you have to collect a key in each level and then go through a door to progress to the next.

There are four worlds with four levels in each. Sixteen levels seems a bit stingy, especially when you consider how many you'd get on a console title (this might seem an unfair comparison, but the blurb does call this the first *Mario 64* clone for the Amiga).

To get to the key, you may have to jump onto moving platforms or blow up a baddy who is carrying the key. All the action takes place on floating platforms. If Zaac walks off the edge, it's curtains, likewise if he comes into contact with any of the aliens (wasps, dragonflies, spiders and a giant end-of-world grasshopper) in the first world and toys (spinning tops, aeroplanes, tanks) in the second world.

You can attack these aliens using bombs. Drop a bomb, run away and in three seconds it'll blow up, hopefully taking the enemy with it. It's hard to judge when and where to place the bombs, especially with the spinning tops, so most of the time it's easier to simply avoid the enemy.

The gameplay is standard fare, but lacks variety. As far as I've discovered there are no power-ups and, unlike other platform heroes, Zaac can't swim, fly or shoot. It's fairly challenging in places though, and I enjoyed playing for hours on end, though I've always had a soft spot for platformers, so I'm a bit biased.

AF69 (Mar 95) – AF talks to Chris Ludwig, ex-Commodore engineer (through Bruce Lepper and Amiga News in France) about the forthcoming new RISC-based Amiga. We review the first A1200 tower system.

STOP THE MUSIC

But while the gameplay is a strong point, the presentation lets this game down. The levels that I've encountered so far (up to level eight) are all rather bland and all the polygons are very simple. I found the music too irritating to listen to for more than a few seconds, and there are only a very few (uninspiring) sound effects. On an AGA machine, the graphics are drawn very slowly and there is an abundance of pop-up. The CGX version runs more smoothly with the draw time speeded up, but the polygons are no more complex and the game isn't any more attractive or colourful. If you're playing on a low-spec machine you can turn off the background effect and use lo-res mode, which speeds up the game considerably.

While I'm griping, I shouldn't miss out the appalling save-game system, which is the reason I only reached level eight. The game auto-saves every time you finish a level, which in itself isn't too bad, but if you accidentally begin a new game (easily done) your one saved game will be overwritten and you have to play right from the beginning.

I believe it's an achievement to get the thing working on such a low-spec machine, but the lack of polish, the poor sound effects, the lack of levels and variety really let this game down. It's playable and reasonably addictive, but don't expect to be amazed – even if you're running it with a fast processor and Retargetable Graphics card.

Paul Cavanagh

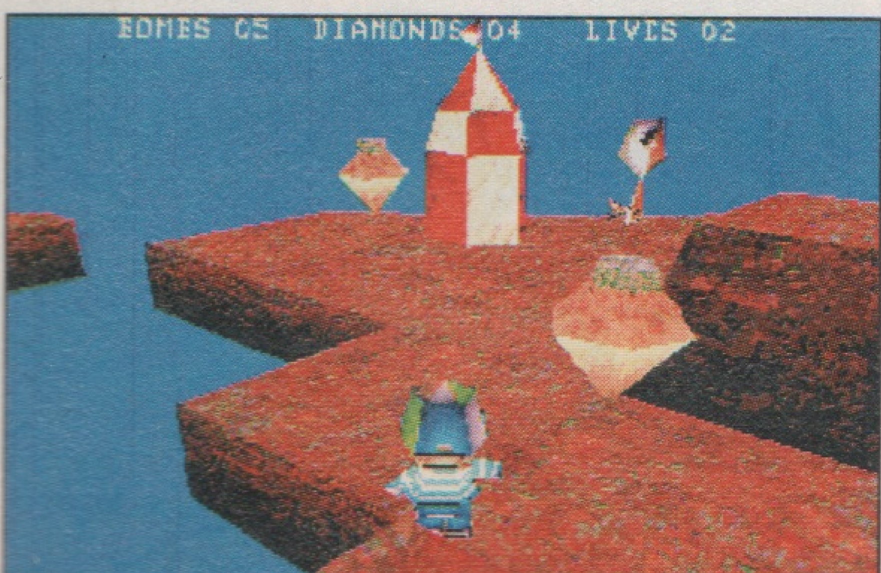
SUPPLIER: Epic Marketing
TEL: 01793 514188
PRICE: £25.00
REQUIREMENTS: '030, CD ROM, RTG Card (optional)

Pros and Cons

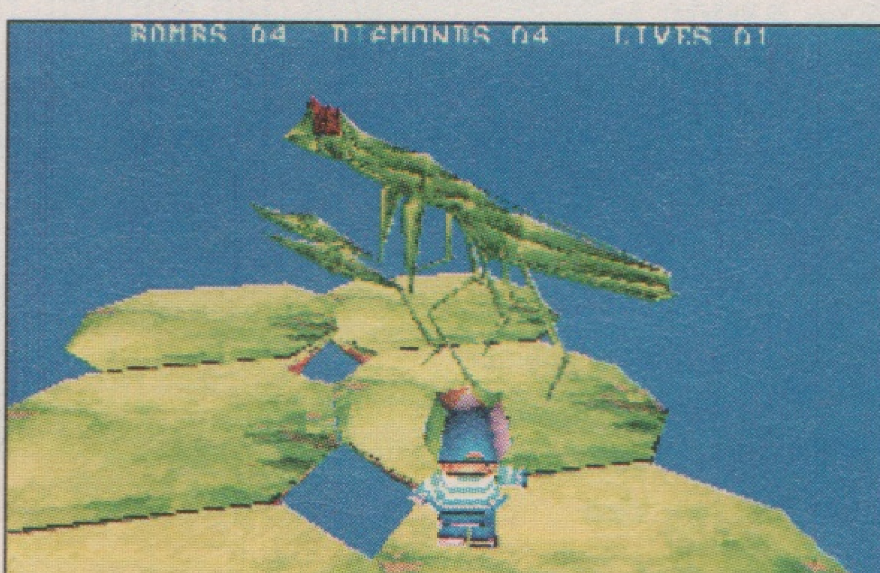
- + The first game of its kind on the Amiga.
- + Fairly addictive.
- – Poorly presented.
- – Not enough variety.

OVERALL VERDICT: A playable 3D platformer that is badly let down by its presentation and lack of features.

62%



If those spinning tops hit him and he falls off the ledge, Zaac is toast.



An evil alien grasshopper with big, scary, red eyes.

Screenplay through time

There's just time for a final look back at some of the finest games to have graced Screenplay before the final credits roll...

Like everybody who works for *Amiga Format*, I'm very sorry to see the magazine closing. There probably isn't a good way to go out, but we decided that it would be best to focus on the positive, so here are my thoughts on some of the titles that made the Amiga such a great games platform. I hope you'll forgive my self-indulgence in getting all dewy-eyed about the games of yesteryear, and be able to understand that this is a strictly personal retrospective. I'm sure that each of you will be thinking of at least one game that I should have mentioned, but have left out. The chances are though, that most of you will be thinking of different games. There were so many, you see.

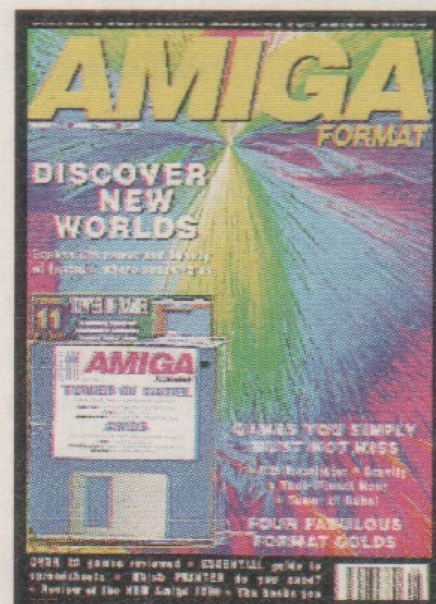
The chances are that most of you will be thinking of different games – there were so many, you see

You might notice that sports and simulator games aren't mentioned much here, which is simply because I've never really been into them, which isn't to say that there weren't damn good games in those genres; it's just that I didn't notice them at the time.

The first game I remember playing on the Amiga was *Robocop 2*, which I suppose means that I entered the market rather late. Having been used to playing Spectrum (and before that Dragon 32) games, I was dumbstruck. What I remember most about that game was the quality of the sound, especially the ker-chunk of Robocop walking about. It seemed to me that the main sprite was huge, and fantastically well animated. I'm sure that *Robocop 2* used a picture of a face becoming more scarred the more injured you became well before *Doom*.



Another World – the first of Delphine Software's classic titles.



AF11 (June 90) – The A3000 is announced in our news pages.



Boom! In later levels of Cannon Fodder you'd fail a mission for hurting the civilians like this.

At this time I was staying with my sister and one of her flat-mates had an Amiga and I saw much more of him and his games than I did of my sister. A few days later we went into town and bought *Z-Out*, which was fatal. We were there until the wee small hours playing a superbly fast shoot-'em-up which allowed two players to play at the same time. It's a surprise my sister still talks to me. Eventually I got kicked out and had to find a way to buy my own Amiga.

One of the mail-order catalogues was daft enough to give me credit to buy my own A500+ Cartoon Classics pack, and while *Bart Simpson vs the Space Mutants* was a distracting enough romp around Springfield, it was another game that held my attention most (see Ridiculous Rodents). Since I was making repayments for the computer it was some time before I had the money to buy full-price titles, so I'd make do with budget re-releases or compilations and playing all the demos available on coverdisks. I seem to recall *Turrican 2* being available cheaply, and playing it solidly until I'd completed the game. Huge end-of-level baddies, a great combination of weapon powerups (what was there? Lasers, spread shot, lightning bolts and that fantastic weapon that could shoot through 360 degrees), loads of stuff to collect and distinct level design kept me going. There were probably too many extra lives available, but it was still a great game. My father gave me *Strider 2* for Christmas, which is a *Turrican*-esque game, but not nearly as good as the first *Strider* game. At some point I bought a Psygnosis compilation, but the only game I remember spending much time playing was *The Killing Game Show*. This was a very fast, very tricky platform game involving much jumping, shooting and puzzle solving. When your little robot got blown up, you could fast-forward through the level that you'd just played until you got to the point where you'd messed up and then resume control,



Back in those days you needed big boxes to contain all the floppies and the manual.



Monkey Island is still giving some of readers problems all these years later.



The inventory, off-line map, stats and action screens of Hired Guns.



Controlling four players in Hired Guns was relatively simple.

which was a very novel way to approach game saves that I've never seen repeated. Staying on the subject of platform games, but skipping a few years, I thought that all three of the

I have to confess to never having played Civilization – shocking, isn't it? Suffice to say no game gets a reputation like that without reason

James Pond games were excellent, most especially the second installment, *Robocod* – highly addictive, very colourful and gloriously silly.

Coverdisk demos remain a great system for try-before-you-buy, and one that I remember very well was for *Pinball Fantasies*. The first game in the series *Pinball Dreams* had been rated very highly by most reviewers but I remained unconvinced that I wanted to go out and buy a pinball simulator. A crafty move by Digital Illusions was to release a demo of the *Partyland* table that cut off after a few minutes play, and then you'd have to reboot and reload to play it again. The trouble was that it was so damn addictive that you just had to play and play and play, until you eventually gave up and went and spent your money on a copy of the game. Those pinball games were sheer genius in their application, and I'm sure many a shift key got irreparably damaged by careless pounding.

Back in my youth I never really had the patience for resource management or god games, although I do remember really getting off on causing earthquakes, floods and moving mountains in *Populous*. Not to mention sending off those little knights to burn and pillage. *Sim City* held my attention for a while, but I'd make a terrible town planner. Even worse than that, though, I have to confess to never having played *Civilization*. Shocking isn't it? Suffice to

Continued overleaf ➡



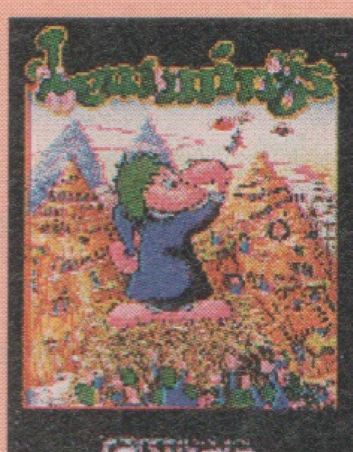
Gameshows are a lot more fun if they're on a pinball table.

RIDICULOUS RODENTS

Like thousands of others, I was hooked on *Lemmings*. The cuteness, the infuriating difficulty, the way in which many of the levels could be completed in a number of different ways helped to make *Lemmings* the legend it has since become. Looking back now, it's quite difficult to remember how original the game was at the time. The trouble is that there have been so many clones as well as all the official add-ons and sequels (*Oh No! More Lemmings!* was followed by *Holiday Lemmings*, then *Lemmings 2 – The Tribes* and the disappointing *All New World of Lemmings*. Other platforms have seen *Lemmings Paintball* and *Lemmings 3D* as well). I must confess that I eventually suffered Lemming fatigue. But the fond memories of ripping the box off my first Amiga and playing well into the night remain with me. Quite how DMA Design made such charming characters from tiny little sprites, and animate them so convincingly is still a mystery to me today. There were some superb details in the game – I particularly remember the spurts of flame being wonderfully animated. And I can still hear the music, most especially that version of *How Much is that Doggy in the Window* with the cows mooing away madly – fantastic. The Amiga version was the original and best, and while the game has been ported to over twenty platforms including C64, Spectrum, Gameboy, PC, Mac and Playstation it will always be an Amiga game to most people.



Oy! Get orf my logo!



Let's go! They were so keen to get splatted.



Level one of Lemmings – the start of a legend.



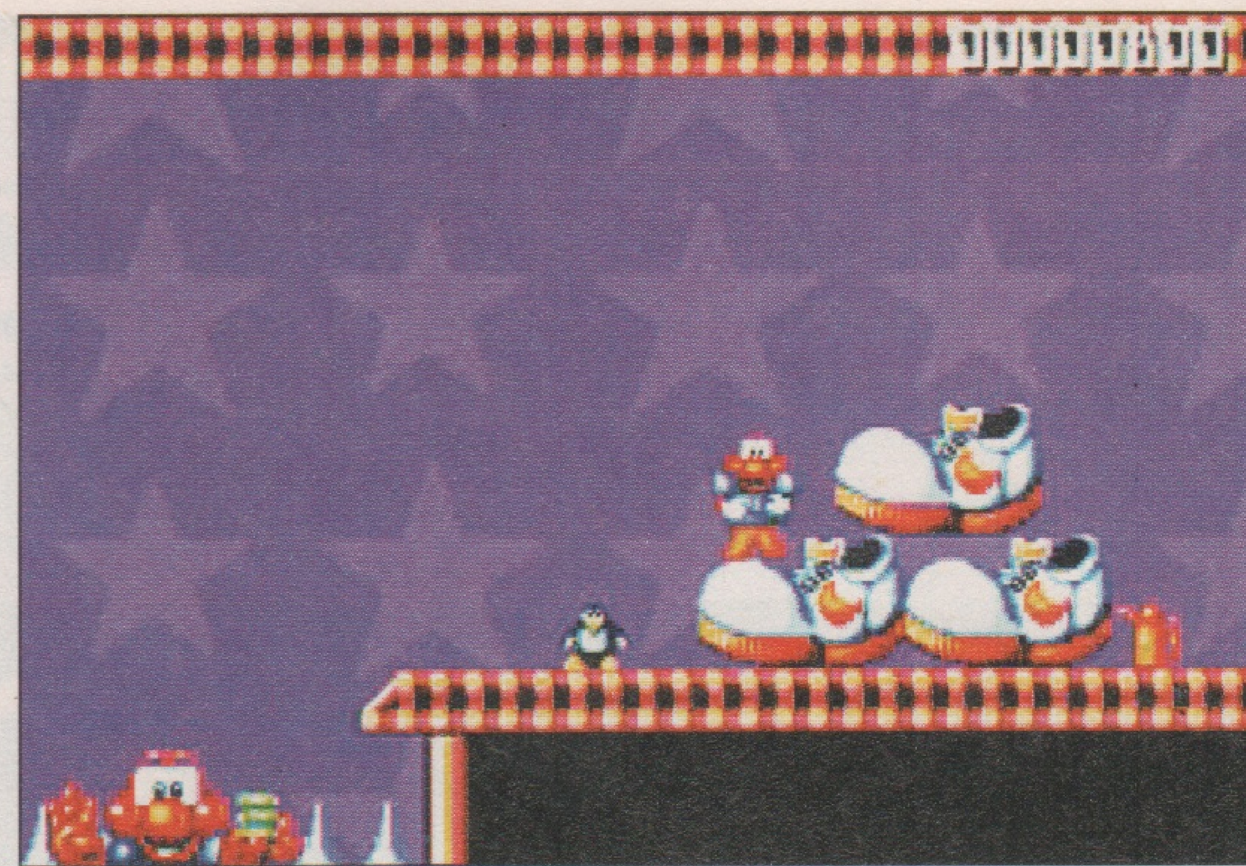
Lemmings 2 introduced a load more skills for the lems to learn.



Sim City gave you the chance to be a town planner. You just didn't get paid.

say no game gets a reputation like *Civ*'s without good reason, and I'd offend far too people by not mentioning it here. *Settlers*, on the other hand, I played a lot. The woodcutters and foresters doing their thing, the pig farmer delivering to the butcher, the miller milling about. Lovely. Such a therapeutic way to spend a few hours.

Point and click adventures are always fun until you get completely stuck. If you were lucky you'd find a solution in *Amiga Format*, if not, you'd probably wander about racking your brain for a while and asking your chums. But figuring these things out always paid rewards with such splendid titles as *Monkey Island, Beneath a Steel Sky* and the ever-popular *Simon the Sorcerer* (will we see the sequel soon? Let's hope so). Humour, lateral thinking, exploration and imaginative locations were the elements that gave these games their lasting appeal.



James Pond flounders all over the plaice in Robocod.

Back to the violence. *Cannon Fodder* was one of the most controversial games to reach the Amiga, with the British Legion insisting that a disclaimer be added to the game because poppies were used in the game to commemorate fallen comrades. It's hardly surprising with a theme tune that ran: "War never been so much fun". But the game was fun – a lot of fun. With a control system that was near perfect, vehicles to commandeer, grenades and rockets to throw about, four different types of terrain and loads of missions, it was fantastic. Mind you, I think the sequel was better because it was a little bit

Cannon Fodder was one of the most controversial games to reach the Amiga, with the British Legion demanding a disclaimer

A HIGHLY ESTEEMED TEAM

There were numerous big name publishing/development houses for the Amiga: Gremlin, Psygnosis, Microprose, Electronic Arts, Bullfrog etc. For my money though, you couldn't get better than Team 17. As far as I can remember, they never released a duff game, and if I



was going to spend money on a full price game it would probably have been one of theirs. They pandered to my tastes you see, releasing highly polished, involving, fast, arcade-style games. *Alien Breed* was unforgettable, especially in two-player mode. The computer terminals where you could play *Pong* before buying weapons power-ups were great and have since been emulated in many different games. The way that you had to rush to the



The Alien Breed are coming out of the walls. Game over, man.

lift before the deck detonated at the end of a level, with the screen turned red because of the emergency lighting was a sure way to get your palms sweating. The guns, the aliens, the explosions, and the sound effects were all terrific.

Despite what Ben had to say about *T-zerØ*, I still maintain that *Project X* was the best shoot-'em-up to grace the Amiga. Sure, it was damn difficult, and until it was re-released on budget there was no cheat mode. But it was



A very pretty, but dead tricky level of Project X.



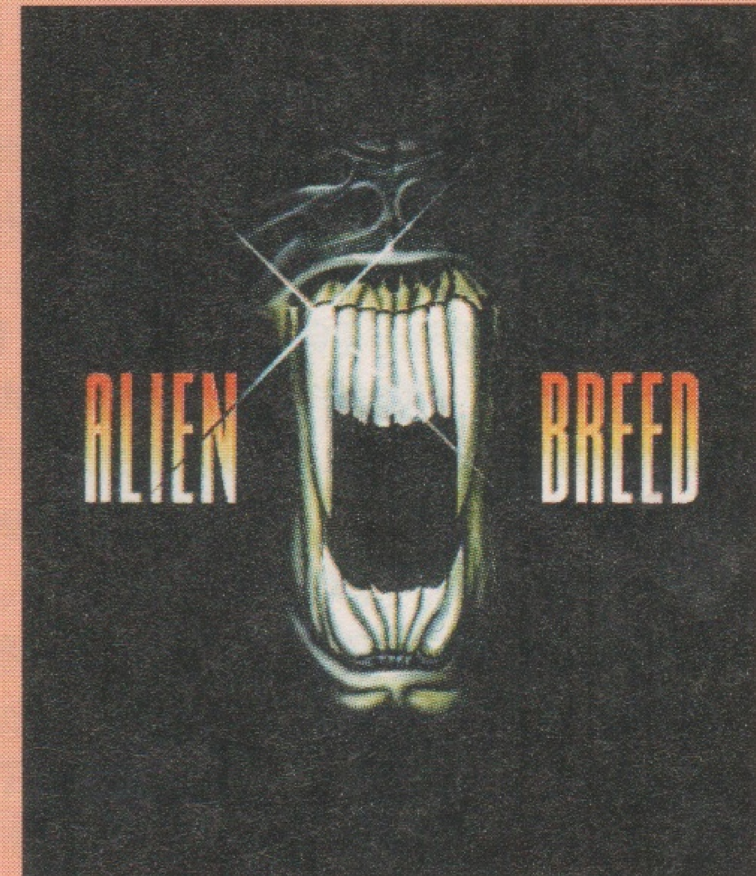
Standing on a bridge in Worms is just asking for it really.

beautiful to look at and the music and speech effects were sharp, and really added to the gameplay. The weapons powerup system was great too, you had to save up icons to get the better weapons (one for speedup, two for guns, three for missiles etc) then waggle the joystick to activate your chosen weapon. I believe a similar technique was employed in Team 17's *Apidya*, but I don't remember seeing it elsewhere on the Amiga.

When I reviewed *Superfrog* recently I really couldn't stop playing it, so if platform games



Yikes! It looks as though Superfrog is going to get spiked.



The results of using a superior brand of tooth polish.

are your thing buy a copy from Epic. There were just too many great games to fit in here, but *Qwak* (budget platform game), *Arcade Pool, Assassin* (like *Strider*) and *Body Blows* all deserve a mention for being great examples of the genres they represented.

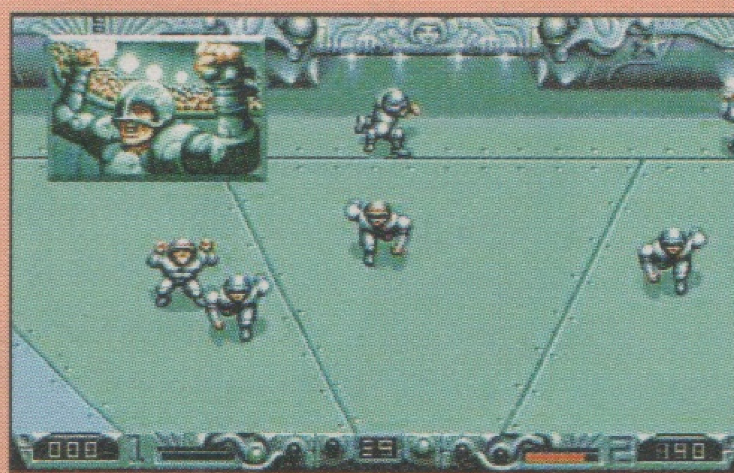
Then there was *Worms*. Andy Davidson won a competition in *Amiga Format* to design a game, which Team 17 would publish. And what a game *Worms* turned out to be – certainly one of the best multiplayer games ever, and not at all bad as a one player game. As with *Lemmings*, there have been plenty of clones and revisions, and it has appeared on a ridiculous number of other platforms. The latest version, *Worms Armageddon*, was never

BROTHERS IN ARMS

In any poll of favourite Amiga games, you're sure to find a few by the Bitmap Brothers. Funnily enough, two of the games that need mentioning were sequels, and I'd never played the original in the series. *Xenon 2* was a mightily difficult (I thought) shoot-'em-up featuring bizarre organic looking bad guys, and some awesome music by Bomb The Bass. It looked and sounded great, but I was just too much of a wuss to stick with it for long.


Shooting a node in Chaos Engine. I loved the bubbling mud pools.

Speedball 2 wasn't a game for the light hearted either. I got much more into this futuristic football game, where you could genetically mutate your team and inflict maximum damage on the opposition. Two player games were always a giggle, while a player on their own would have real challenge beating the game's own teams. The Bitmaps made a point of making their computer-controlled characters unpredictable and seemingly intelligent, which was also a major selling point for *Gods* along with some very slick presentation and mind-taxing gameplay. *The Chaos Engine* was rather like *Gauntlet*, except that if you didn't have a friend to play with, the computer would take over the second player and do it very convincingly indeed.

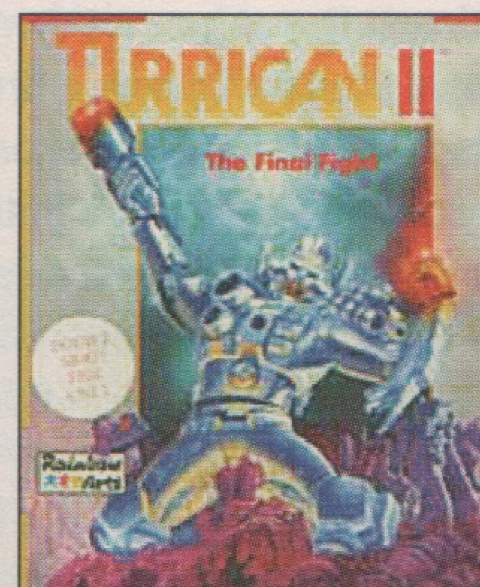

Ice cream! Ice cream! So spoke the vendor in Speedball 2.


Xenon 2 had a very unique look and feel.

easier, so I managed to complete it. So, nice one Sensible Software. And while we're on the subject, *Sensible Soccer*. I'm not a big fan of sports games, but this was one of the most popular series of football games ever and deserves recognition as such.


An action replay in Sensible Soccer allows goal scorers to gloat.

A few games stand out for their innovation. *Another World* and then *Flashback* were the first games I encountered that contained animated cut-scenes, and were wonderfully polished and involving. *Hired Guns* was outstanding for allowing four players all using the same computer to play simultaneously in a role playing game. What's more it remained an immensely playable game with just one player controlling four characters via a fantastic user interface.



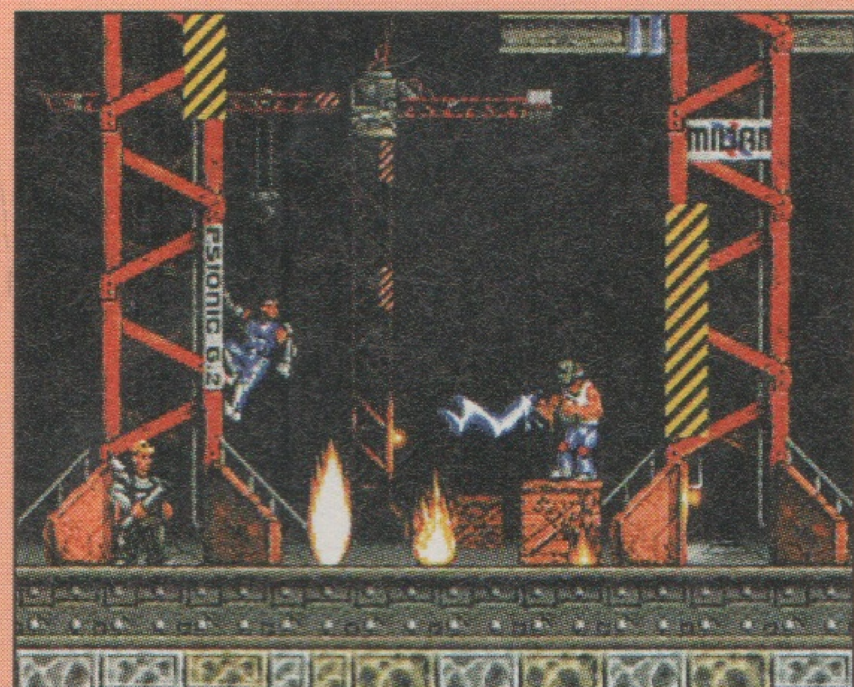
Come on lad, there's no time to sit waving your arms about. You'll be wanting tea next.

In the ten months that I've been writing for *Amiga Format*, I've been lucky enough to review some very good games. The ones that spring to mind immediately (in no particular order) are *Wasted Dreams*, *Superfrog*, *Phoenix Fighters*, *wipEout 2097*, and *Heretic 2*. Richard reviewed *Foundation the Director's Cut*, but from where I was sitting it looked excellent, and *Napalm* was a bit before my time at the magazine – I've not had time to play it, but I'm assured it's magnificent.

In the ten months that I've been writing for Amiga Format I've been lucky enough to review some very good games

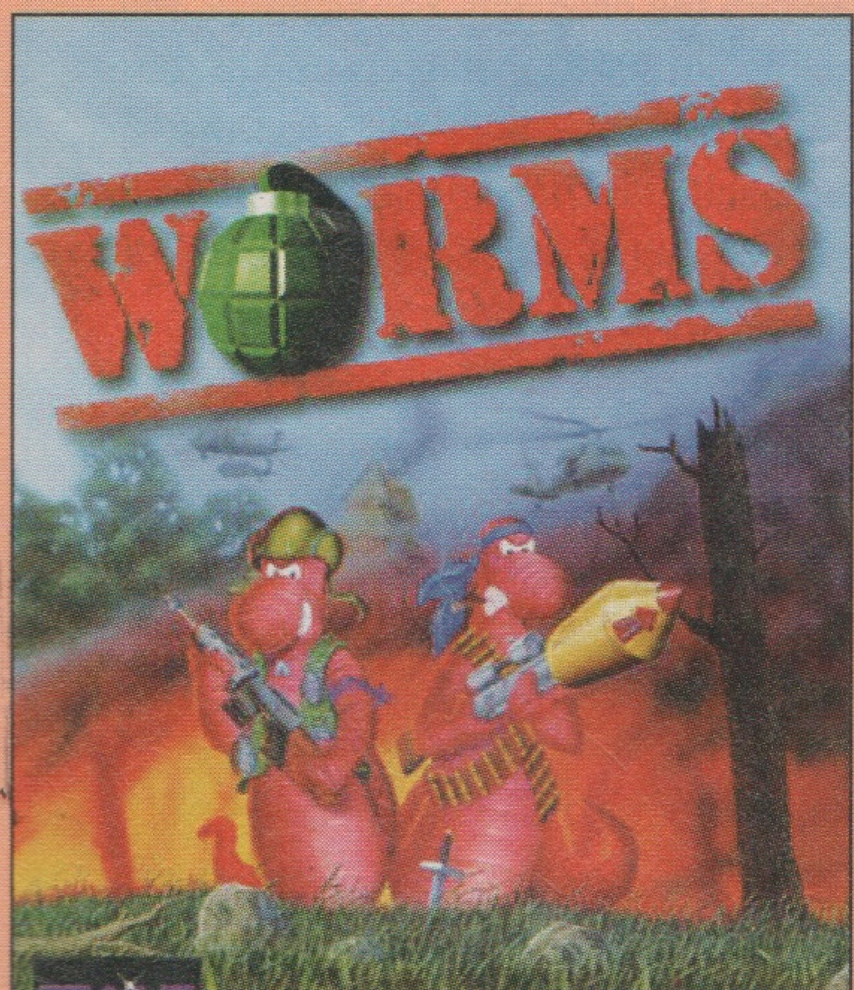
I hope that I've managed to muster some fond memories here, and that I haven't offended anyone too much with my glaring omissions. Isn't the Amiga simply wonderful?

Paul Cavanagh 


In Assassin you could climb, jump and swing all over the place.

released for the Amiga, but Hyperion (who converted the excellent *Heretic 2*) have acquired the license and they are hoping for a release sometime this year.

Oh yeah, and *Nightlong*, expected from clickBOOM any time now, was originally developed by Team 17 too.



Come on then! The worms get nasty.


Settle down for a game of Settlers; you may be there a while.


See? Less arm waving, more action equals more fun.

PD Select

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Workbench 2000

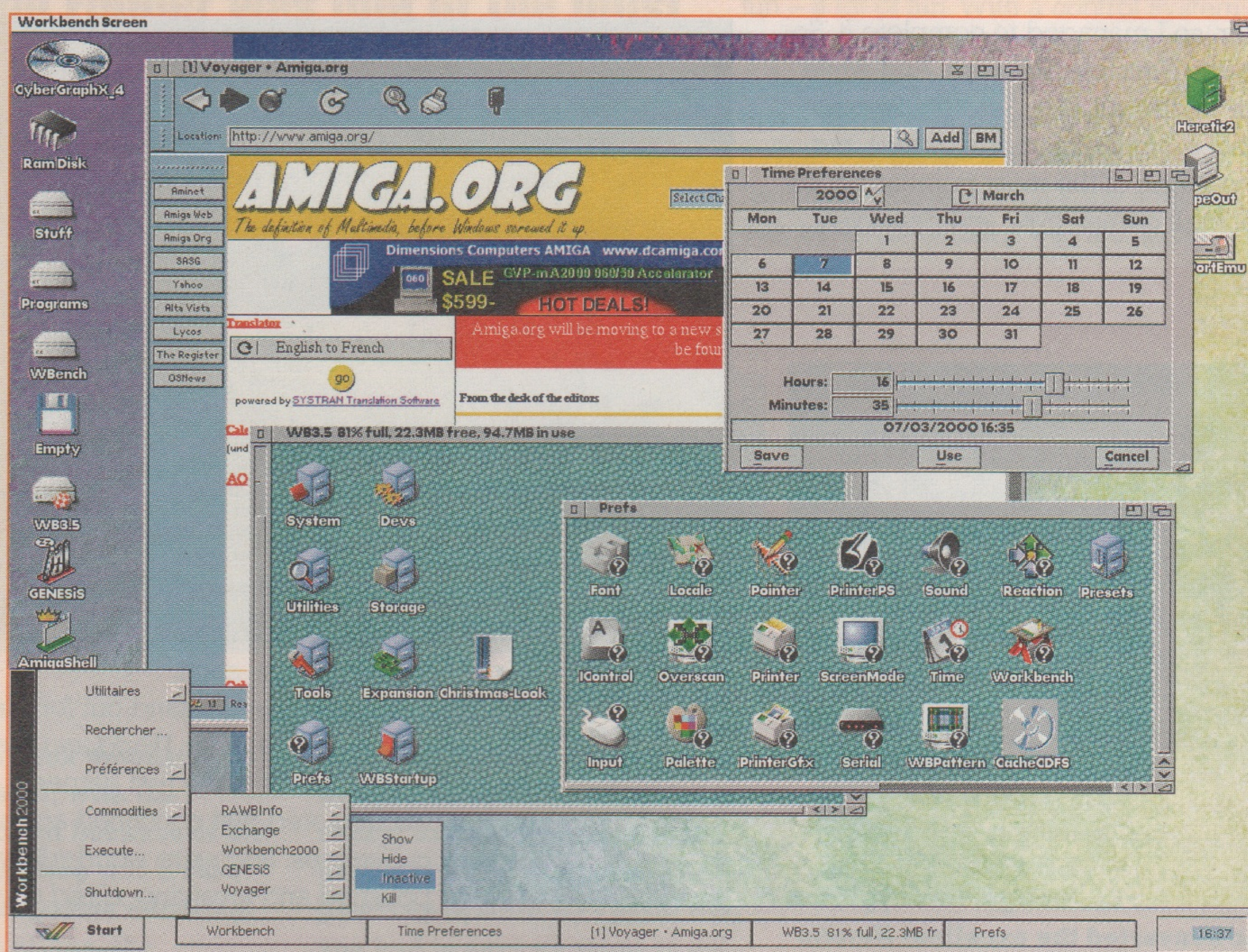
Delight in it or detest it, you cannot deny that the Windows StartBar is now a firmly entrenched graphical interface idiom. Despite the illogicality of having to click a button called 'Start' to turn off your machine, StartBar clones are appearing for desktop environments from KDE on X to the Amiga's Workbench. God only knows why.

Workbench2000 is the latest look-a-like for the Amiga. It provides the usual pop-up tree of menus, buttons for each window currently open, and a clock. The edge with WB2000 is that it is written using MUI.

Unlike the real thing, you may not configure the position and size of the bar with Workbench2000; you are stuck with it at the bottom of the screen. Clicking one of the window buttons will activate and bring to the front the corresponding window. The problem here is that it rapidly becomes confusing when you have a lot of windows and screens open.

The buttons cannot be arranged into multiple rows as per Windows; they all get crammed into one row. Also, all open windows get listed, even ones on screens other than the Workbench screen. It would be nice to have some way of signifying which window belongs to which screen and perhaps have a method of filtering out certain types of window.

The menu tree has a preset section with built-in functions and a section where you can add your own menus and options. Built-in functions include a shutdown command, which allows you to either quit the program or reboot your machine, an execute command, where you can select an arbitrary program to launch, and a commodities menu, which lists all commodities currently running on your system. For each commodity, there is a sub-menu with options to show, hide, disable and kill that commodity.



If you are sure you really want a Windows-style StartBar on your Amiga, you can have one.

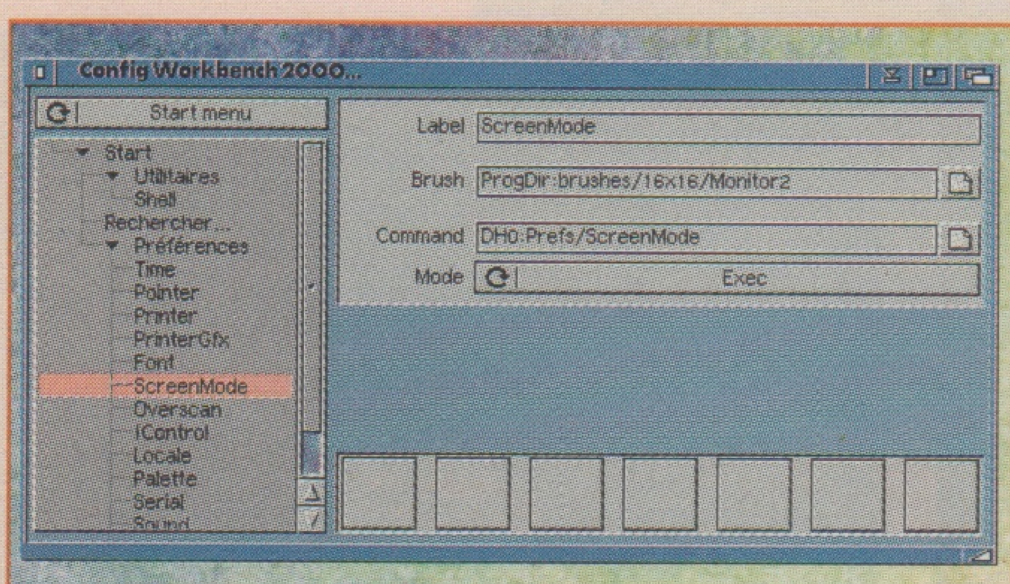
The user-definable section is configured with the built-in editor, which is opened by clicking the icon at the far-right of the bar. Here you can add short-cuts to launch your favourite applications, tools, ARexx or DOS scripts. An oversight in the menu operation, however, is that menus that are too tall to appear on the available screen height simply do not appear. A Windows-style scrolling menu ought to be implemented to cater for situations such as these.

Workbench2000 is a potentially good looking tool for people who want a Windows-style program launcher for Workbench. But in addition to the comments made above, I have a couple more general criticisms.

Firstly, WB2000 makes use of the ImageButton custom class to prettify its menus and buttons, but on none of the machines I tried would it actually display these images properly. On a machine running *CyberGraphX4*, no images at all are drawn, while on *Picasso96* the images are corrupted. I suspect this is due to a bug in the ImageButton class itself, though.

The other problem is a lack of multi-threading within the program. For example, the taskbar itself is not functional while one of the program's other windows is open. Select the Execute command and the bar itself doesn't refresh itself or react to input until you close the Execute requester. Worse still, it doesn't even block input; all input events are stored up and processed once the bar becomes live again.

Work is definitely required for WB2000 to become the definitive StartBar clone.



Workbench 2000 has a built-in prefs editor. The button images don't seem to work here, either.

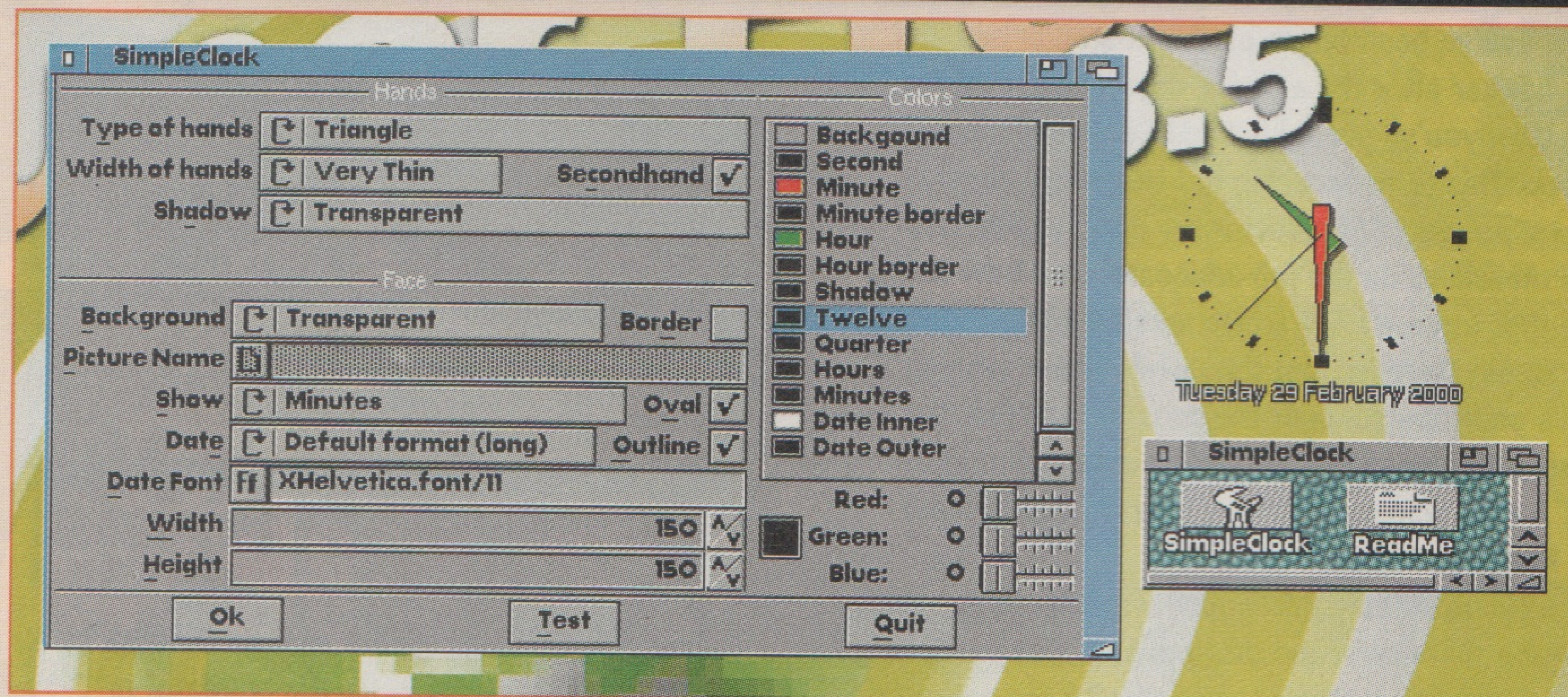
BY: Emmanuel Dausse
WARE: Shareware
FROM AMINET: util/wb/WorkBench20000.lha
SIZE: 87K
REQUIRES: MUI 3.8, ImageButton MCC, ListTree MCC

SimpleClock 1.3

Despite what its detractors say, AmigaOS3.5 does actually have some neat new features. One of these is the new AppIcon functions. AppIcons are the icons that appear on your desktop that do not represent the usual filesystem objects but are actually under program control; they supply an extra way of interacting with and sending commands to a program.

Under previous OS releases, all that was possible with AppIcons was 'Open' commands (via a double-click) or the passing of filenames (via the drag'n'drop of conventional icons). Under OS3.5, programs can do a whole lot more. All the Icon menu commands – such as Copy, Rename, Information and Snapshot – can be applied to an AppIcon, if the controlling program wants to support them. How these commands are interpreted is up to the program. Another new feature is that the imagery for an AppIcon can be updated by software while the icon is displayed on screen. This offers a world of possibilities.

SimpleClock makes use of all this new functionality to render a analog clock on your desktop as an AppIcon. It behaves like a normal icon, but updates in real time – even with a second hand if you wish. Like normal icons, it can have a border or be transparent and can be dragged anywhere you like on the desktop. But the new snapshotting capability means that SimpleClock can remember its position itself. You no longer have to fiddle about trying to specify x and y coordinates by hand.



For those obsessed with time, SimpleClock can cover your entire desktop with a clock.

Opening the icon – either by double-clicking or using the Open menu command – reveals SimpleClock's preferences editor. Here you can configure a huge range of options: the style of the hands, pen colours, transparency, date format and so on. The editor window is built with Reaction and hence is functional rather than visually appealing. The only fault I would say is the way you select the pen colours. This is done with sliders for red, green and blue components; a standard colorwheel or a MUI-style pop-up window would be a lot easier.

SimpleClock is well executed concept. Its usefulness is another matter. Does anybody actually want a clock on their desktop where it can be obscured by windows? Personally, I think the a simple digital clock in the titlebar of the screen is much clearer.

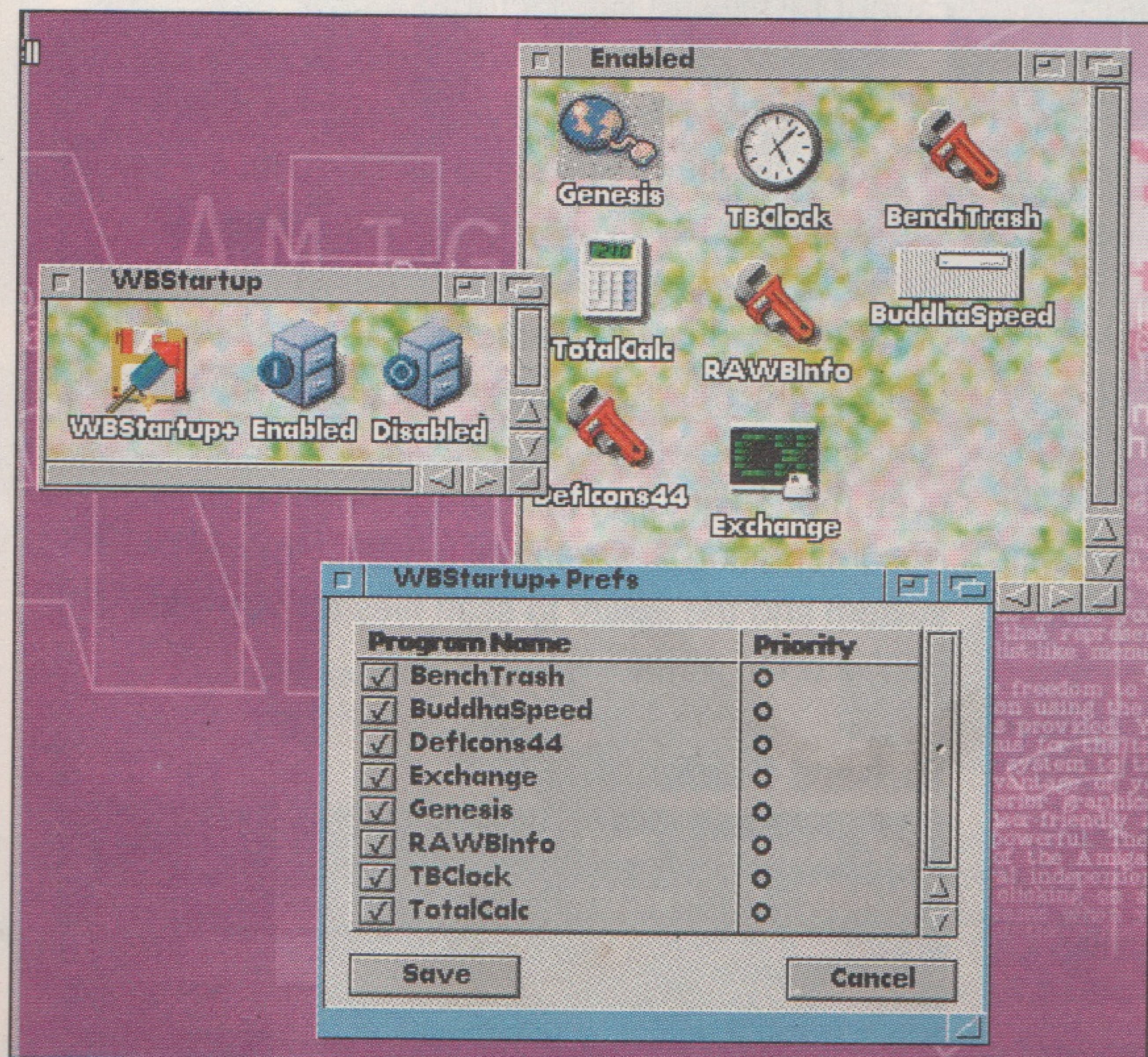
BY: Sebastian Bauer
WARE: Freeware
FROM AMINET: util/time/simpleclock.lha
SIZE: 16K
REQUIRES: OS3.5

WBStartup+ v3.1

Most Amiga users will be aware of or, indeed, use John Hughes's WBStartup+. It is a tool to provide greater control over how Workbench launches at boot time those programs in the WBStartup drawer and displays a Mac-style progress bar while it does so. Unfortunately, the original version of WBStartup+ is not too comfortable running under OS3.5, most notably being unable to display the new OS3.5 icon images in its progress window. Thankfully, Simon Tyrrel has now taken over development and has made several updates to cure such problems. He still has much work to do, though.

To understand the problems with WBStartup+, it is useful to know what happens when you double-click an icon to run a program from the desktop. Workbench sends each program it starts a message containing a list of any icons that are to be used as parameters for that program and to which the program must reply before it quits. Therefore, to fool a program into believing it was started from the workbench, you have to emulate this message passing. This means that whatever tool is doing the launching must wait around for the launchee to quit – which is not really desirable.

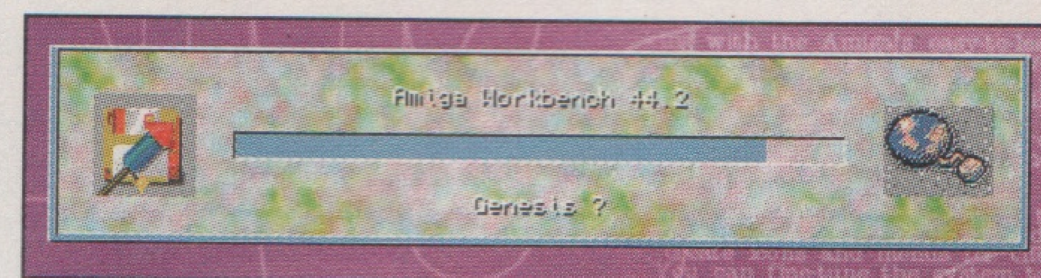
The original WBStartup+ gets around this problem by using Stefan Becker's wbstart.library. This creates a daemon to handle the launching of and communication with progams as Workbench processes and provides an API to instruct the daemon. Hence, WBStartup+ could do its thing and immediately quit without having to worry about what happens to any programs it ran from your startup drawer.



WBStartup+ makes it really easy to select which and in what order tools are launched when Workbench opens.

The API for Workbench in OS3.5 provides a dedicated function to launch Workbench processes. Unfortunately, this function doesn't always run programs in the manner that launching a program from the desktop would. For example, if a project icon is merely a link to an executable in another directory then this call falls over. Simon's first update to WBStartup+ used this new function rather than the wbstart.library and so failed to completely emulate Workbench's handling of the startup drawer.

This version contains an option to go back to using the wbstart.library for better compatibility. However, WBStartup+ is still not fully functional on OS3.5. When it is installed and run, you will no longer be able to change the screenmode of your Workbench screen without rebooting. Intuition still thinks that there are windows it cannot close on the desktop and so refuses to close the screen.



You get a rather nice progress bar while WBStartup+ fires up whatever tools you want.

I suppose this is due to the new WBStartup+ tool itself leaving behind some residue which confuses Workbench rather than the wbstart daemon being the culprit because the problem still occurs when you opt not to use the wbstart.library.

One other point worth making is that, for full functionality, you should use the original wbstart.library, not Stephan Rupprecht's OS3.5 emulation of it. This latter plugs straight into the new Workbench API, so will cause the same problems as using the API directly.

Besides these issues, the WBStartup+ package needs some cosmetic cleaning up. The install script, for instance, doesn't install wbstart.library for the OS3.5 version of the program; it also doesn't set up the paths in the prefs editor's ToolTypes properly.

Additionally, icons with a transparent background are not rendered as such on the progress bar – they get a grey background – and it would be nice to see the prefs editor updated, perhaps with a Reaction-based interface.

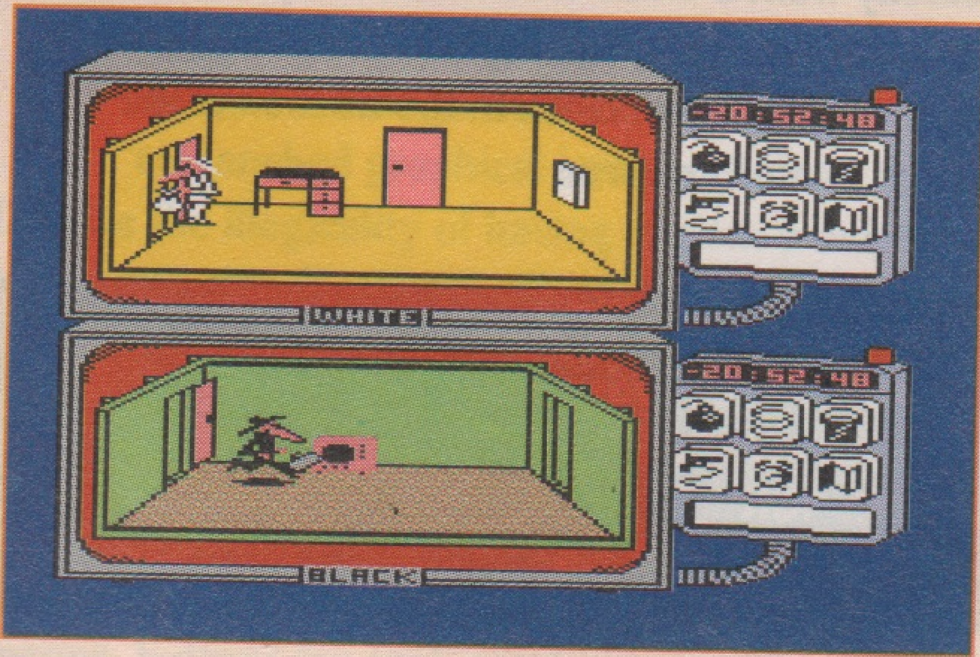
BY: John Hughes and Simon Tyrrel
WARE: PostcardWare
FROM AMINET: util/boot/WBStartup+.lha
SIZE: 250K

Continued overleaf ➡

Frodo v4.1a (WarpUp rev2)

If you've been bitten by the nostalgia bug and hanker after the simpler days of 8-bit gaming then you've probably tried Sebastian's Bauer's *Frodo*. This is an accurate but resource-hungry C64 emulator; 68K processors don't really have the muscle to do the job adequately, so how about the PPC instead? A WarpUp version was produced by Stefan Haeuser, but this, while rather nippy, gave poor control over the screenmode that the emulation runs in and doesn't support sound at all. A new WarpUp port has now been produced by Matthias Roslund.

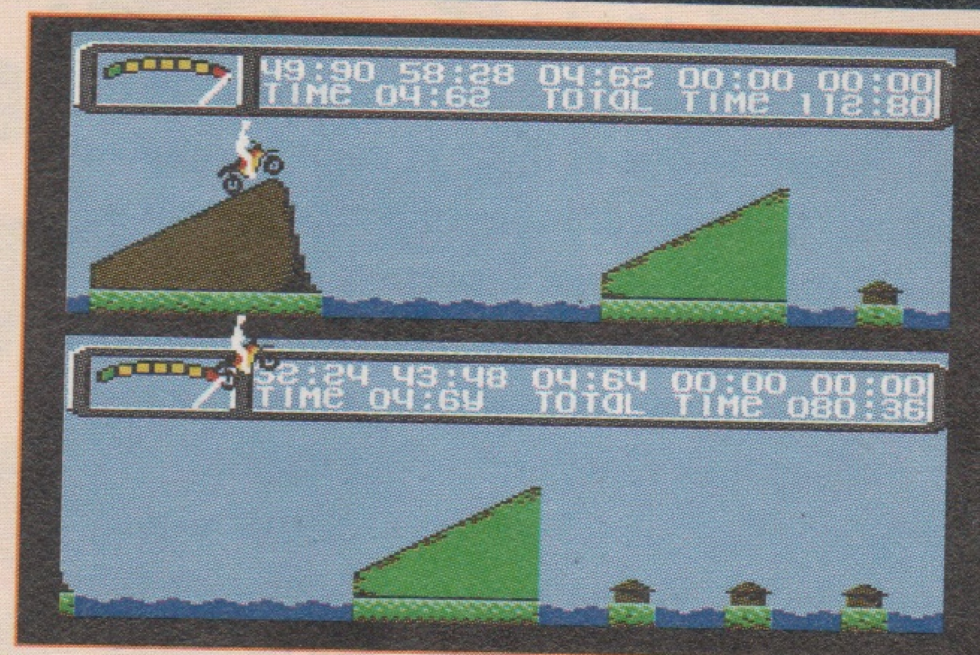
The first thing you notice with this new version that unlike the original and the other WarpUp version, this one has no GUI to configure the emulator. The few options that it does support must be specified as parameters on the command line. Also, when running you get no status indicators – such as drive access lights – and no menus to modify settings at runtime. This means, for example, that you cannot change the disk in the emulated disk drive once the emulator is running – and therefore you cannot play most multi-disk games.



The best reason for a getting C64 emulator is nostalgia. Who remembers Spy vs Spy?



This version of Frodo lets you play those old classics, such as Way of the Exploding Fist...


...and Kickstart II, on your PowerPC Amiga. It looks, feels and even sound like the real thing.

One advantage of Matthias's release of Frodo is that you can choose to run the emulation in any screenmode – unlike the previous WarpUp version which gave a restricted choice through RTGMaster. Obviously, a graphics card is highly recommended. If you create a custom 384 by 272 screenmode, you can use this for your emulated C64 and get a display which fills your monitor screen with full-size borders for that authentic look and feel.

As with the original version, there are three Frodo executables in the package differing in accuracy of emulation and speed. The basic version runs C64 games at full speed on my 200MHz 604e-powered A4000. The full-on emulator – necessary to get some games, such as my fave, *The Way of the Exploding Fist*, to look right – crawls. The audio emulation sounds faithful and the speed is dependent on the speed of the emulator. A performance comparison with the previous WarpUp version is difficult because there is not way to check whether both versions are configured similarly.

This release of Frodo is the best in that it gives you the full screen experience and sound but it needs a lot of work. Features from the original Frodo should be added, such as the built-in machine monitor, frame grabber and the ability to swap disks without quitting the emulator. The documentation is also rather skimpy and a GUI prefs editor would be nice.

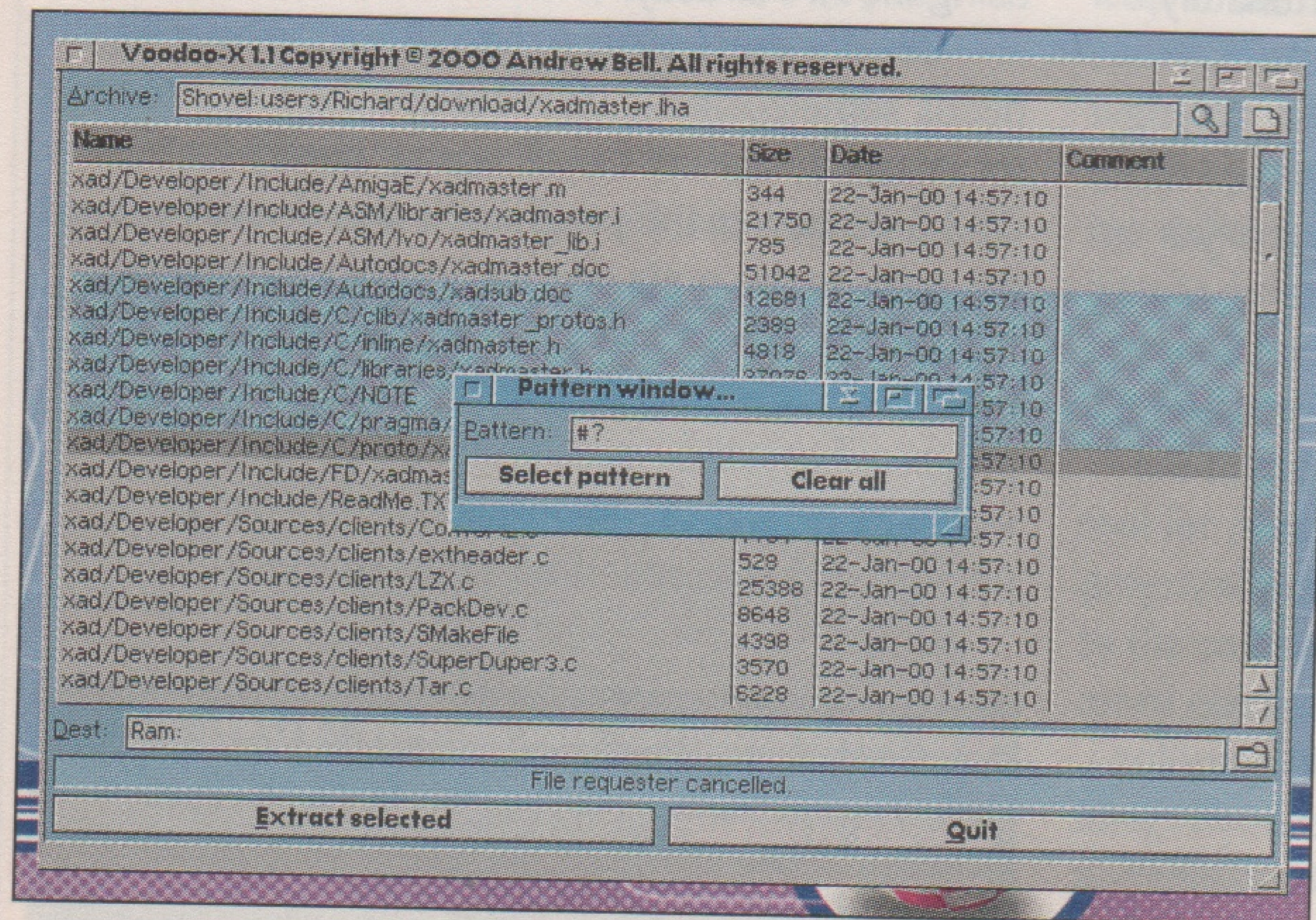
BY: Mathias "AmiDog" Roslund
WARE: Freeware
FROM AMINET: misc/emu/Frodo.lha
SIZE: 384K
REQUIRES: WarpUp

Voodoo-X v1.1

Surprising though it may seem, we still get many calls here at *AF* from readers who do not know how to unpack file archives. Given the byzantine intricacies of all the various archiver tools – LhA, LZX, tar, and so on – what we really need is an easy-to-use graphical front end which can handle all the various archive formats. Many attempts have been made to create such an entity, but none have really stood out until now: Voodoo-X.

In essence, Voodoo-X is simply a MUI interface for Dirk Stoecker's XADMaster system, the shared library which provides a uniform interface for the unpacking of all the multitude of archive types. Consequently, Voodoo-X can handle most archives you've heard and many that you haven't. It also copes with disk archives such as the DMS format, and although it doesn't allow you to extract an entire disk image, it does permit access at the file level. Another bonus of the XAD system is that it automatically recognizes archives by their internal structure not their filename suffix, so Voodoo-X is an ideal tool for processing archives stored in your web browser's cache (which may get the appropriate filename extension).

When you load an archive into Voodoo-X, it presents you with a list of the contents in a standard NListView. It displays each file with its path, size, modification date and comment in separate columns, but, although you can re-arrange the ordering of the columns, you cannot sort the list by the column of your choice. Perhaps an oversight? Another possibility for future enhancement would be, instead of showing the contents of an archive as a flat list, to present it more naturally as a tree, perhaps with the new NListTree custom class.



It's got a silly name and still needs some tidying up around the edges, but Voodoo-X is a great piece of freeware.

Anyway, you can select which files you are interested in either by keyboard or mouse or by file pattern. Hitting the extract button will then unpack these files to your chosen destination directory. The full path of any files you extract is always created; it would be nice to have an option to unpack files without the path for the occasions when this is handy.

Double-clicking an entry will attempt to view that file with Multiview. Voodoo-X launches Multiview via the wbstart.library (see WBStartup+ for more info) and again this causes some problems. I was testing under OS3.5 only, but I found that, if Voodoo-X was run from the Workbench, then it was only possible to display files if Stephan Rupprecht's wbstart.library emulation was installed. The only reason I can think of for this fault is that Voodoo-X is not able to access the system command path and so is unable to locate Multiview. However, the benefit of doing it this way is that you get concurrency on the cheap and so are able to view multiple files at once. In a future release, I would like to see Andrew implement a filetyping system, where you could configure different viewers for different filetypes. At the moment, for instance, there is no HTML datatype so archived web pages cannot be viewed satisfactorily.

Despite the niggles, Voodoo-X is a first-class piece of work. The GUI is well-designed and simple to use, with plenty of keyboard shortcuts for speed (although the tab-cycling needs to be fixed). It processes archives much more quickly than rival products, and neats touches like the archive history (which remembers the contents of previous archives you looked at) increase its speed and usefulness even more. Factor in the comprehensive HTML documentation, the general flexibility of the XAD system and the ability to scan files for viruses and you're on to a winner.

Richard Drummond

BY: Andrew Bell
WARE: Freeware
FROM AMINET: util/arc/Voodoo-X.lha
SIZE: 101K
REQUIRES: MUI 3.8, NList MCC, XADMaster (wbstart.library and xvs.library optional)

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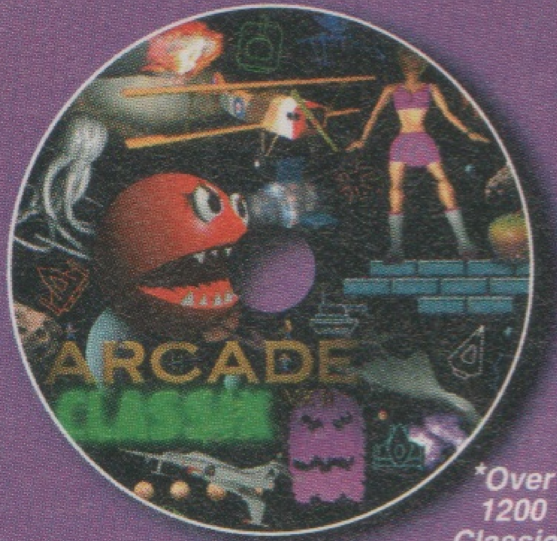
sports mad!
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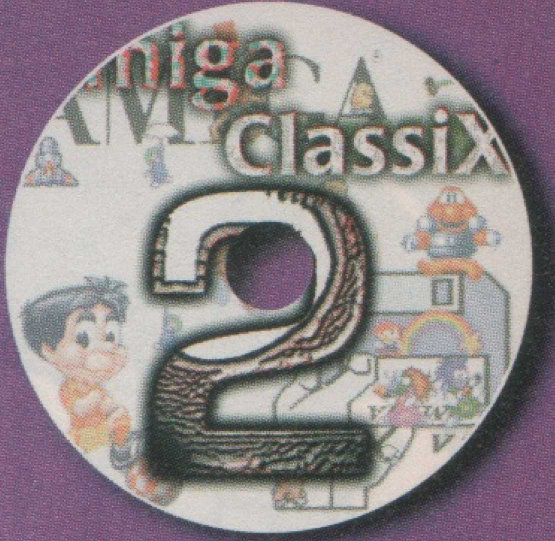
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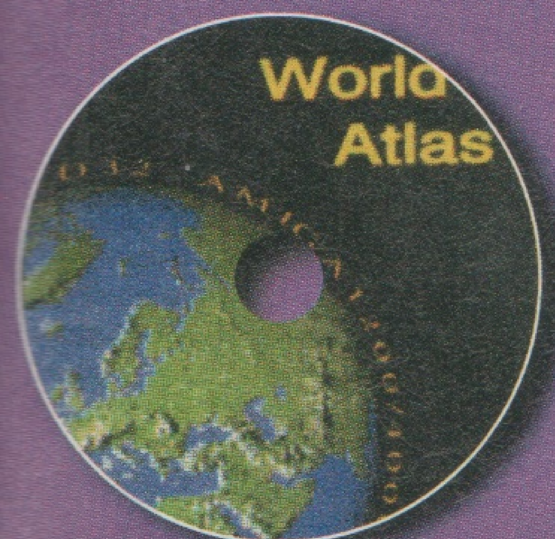
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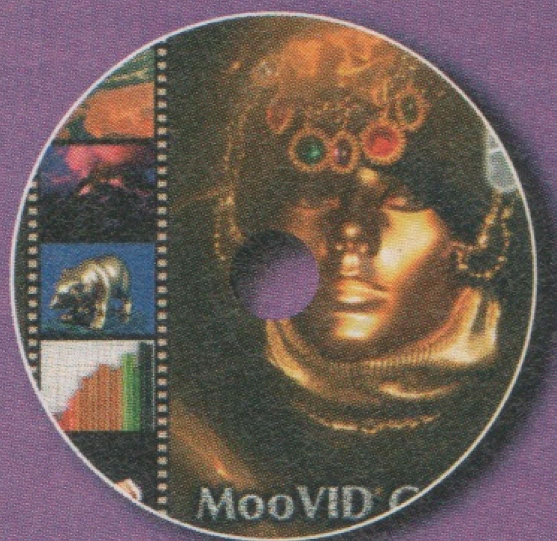
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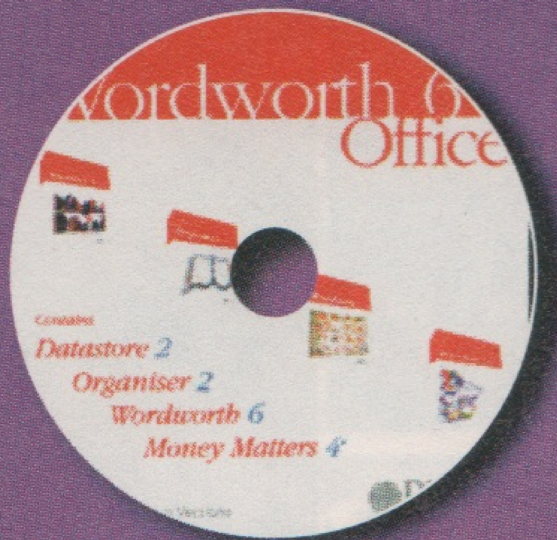
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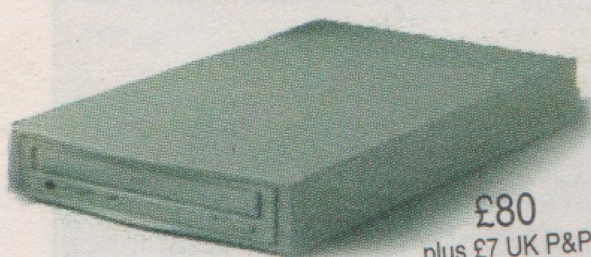
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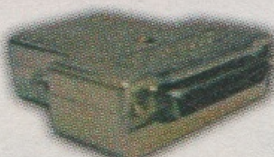
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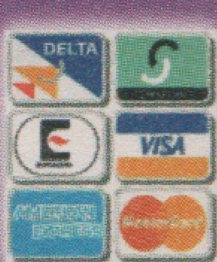
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Serious Audio Evolution

Serious multitracking software for AHI arrives at last

Well then. I guess this is it. The end of the road for the *AF* serious section. As if I didn't have enough to feel sorry for myself about already, I won't be getting to review the no doubt excellent *Art Effect 4* in the next month or so, nor the has-to-have-been-seriously-updated-to-be-really-great *Amiga Writer 2*, from the same company Haage & Partner. I won't have the chance to bring you my forthright views on *Photo Folio*, which also looked superb but couldn't be fitted in here, nor will I get my greasy mitts on a BoXeR on your behalf or plug a spanking new AmiJoe card into our A1200 and free it from the burden of a 68020 forever thanks to its built-in 680x0 processor emulation.

I guess what I'm really trying to say is that, even though we'll no longer be here (in the mag, that is – Rich and I will still keep an eye on afb) keeping you up-to-date with the latest and greatest software and hardware reviews, it doesn't mean the Amiga is dead, or even close to it and there are some corking products coming real soon now. Keep the faith, keep your Amiga and keep upgrading it. You know it still makes far more sense than the rather grim alternatives...

Ben Vost

SERIOUS INDEX

On the CD -In_the_Mag-/AudioEvolution



AF118 (Xmas 98) – OS3.5 officially announced. Power and DCE promise a dual G3 accelerator and Weird Science and Blittersoft argue for their Cerberus machine housing a PC with Mac and Amiga emulators.

Amiga audio devotees have waited years for something like *Audio Evolution* – a high quality digital recording and mixing package built on the AHI retargetable audio system. It's aimed at home studio musicians, and supplied on CD with documentation in the form of a 68K AmigaGuide. Its main rival is *Samplitude Opus*, reviewed in *AF111*.

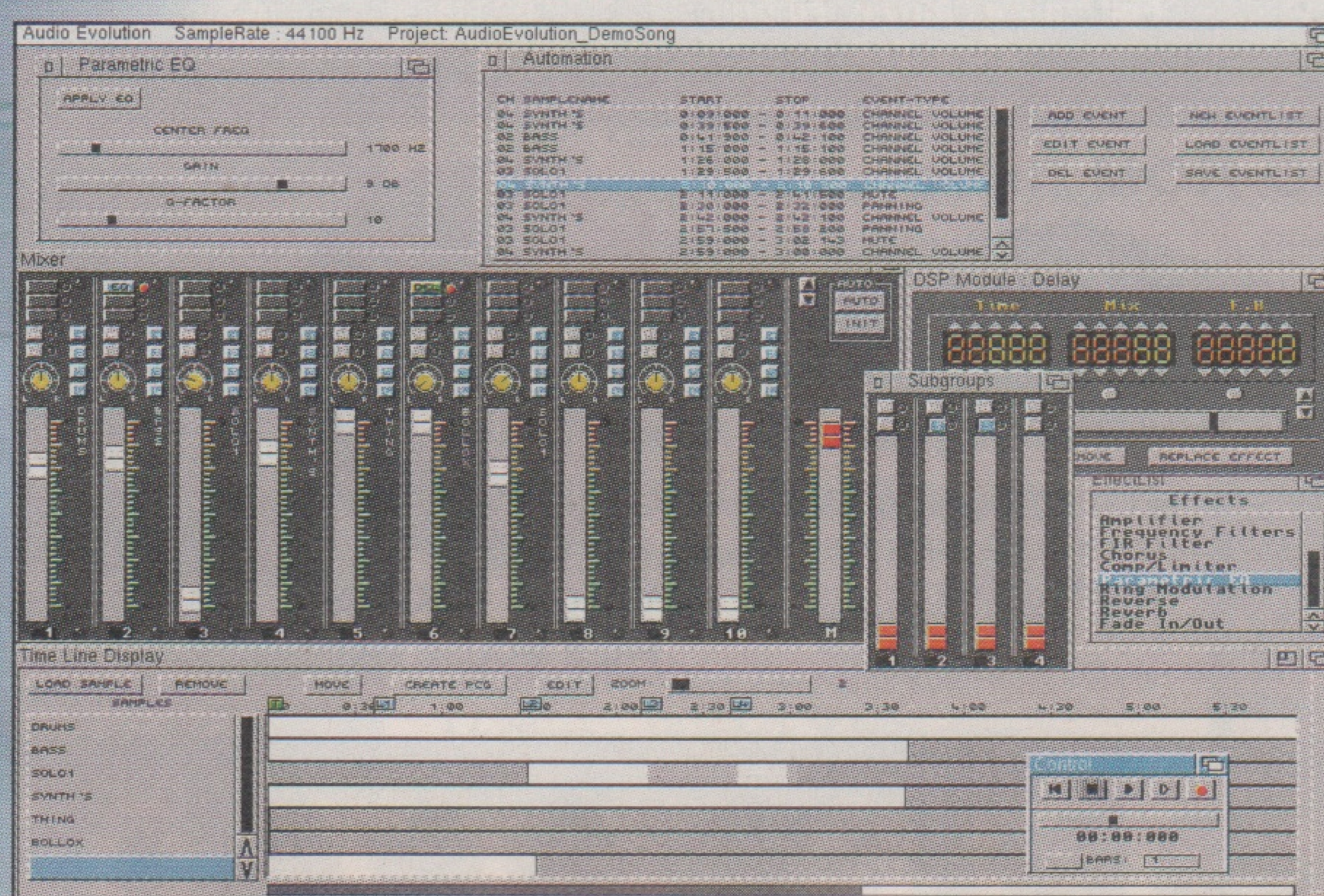
Audio Evolution uses AHI, rather than custom drivers, without invoking the noisy and CPU-hungry sample conversion options that put some people off retargetable audio. It offers real-time automated mixing, metering and digital effects on up to 30 samples of any length.

Audio Evolution appears simpler than *Samplitude*, especially if you're already familiar with studio mixing gear. It pushes the desktop metaphor into the studio domain, with mouse-controlled sliders, buttons, lights and even rotary controls like those on an analogue mixing desk. This is a mixed blessing; the package is superficially familiar, the controls are where you'd expect them and function as you'd expect, except that with one mouse pointer you can only adjust one thing at a time. Thankfully, *Audio Evolution* lets you build up a complex mix one tweak at a time, by recording and playing back adjustments as if you were using an automated desk.

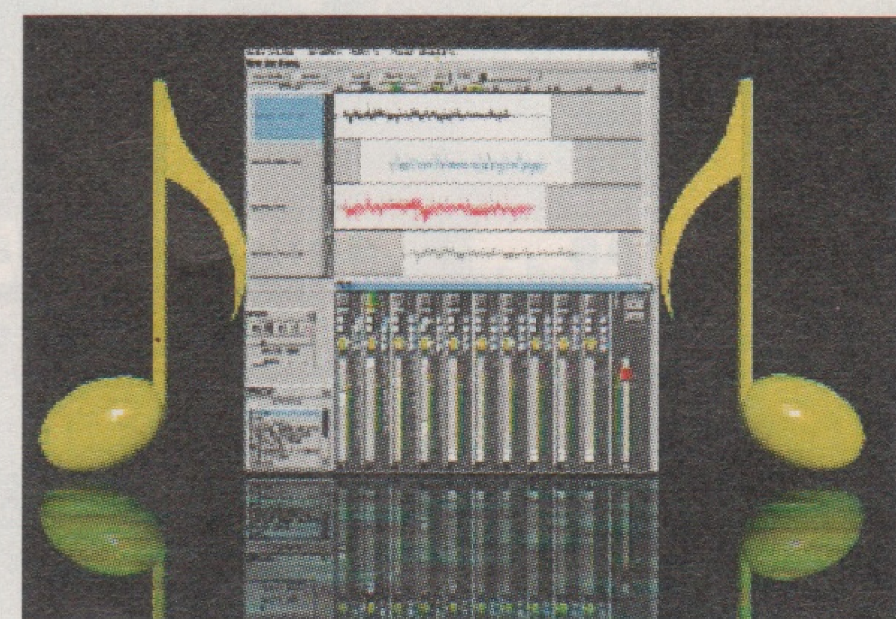
It's not as intuitive as using both hands for cross-fades and combination effects, but good results are possible and it is far quicker and considerably more flexible than *Samplitude*, where mixing and editing have to be done in step time, making modified copies of each sample.

CONSUMPTION

The downside of this interactivity is that



Pro features include automation, groups, FIR filters and DSP effects.



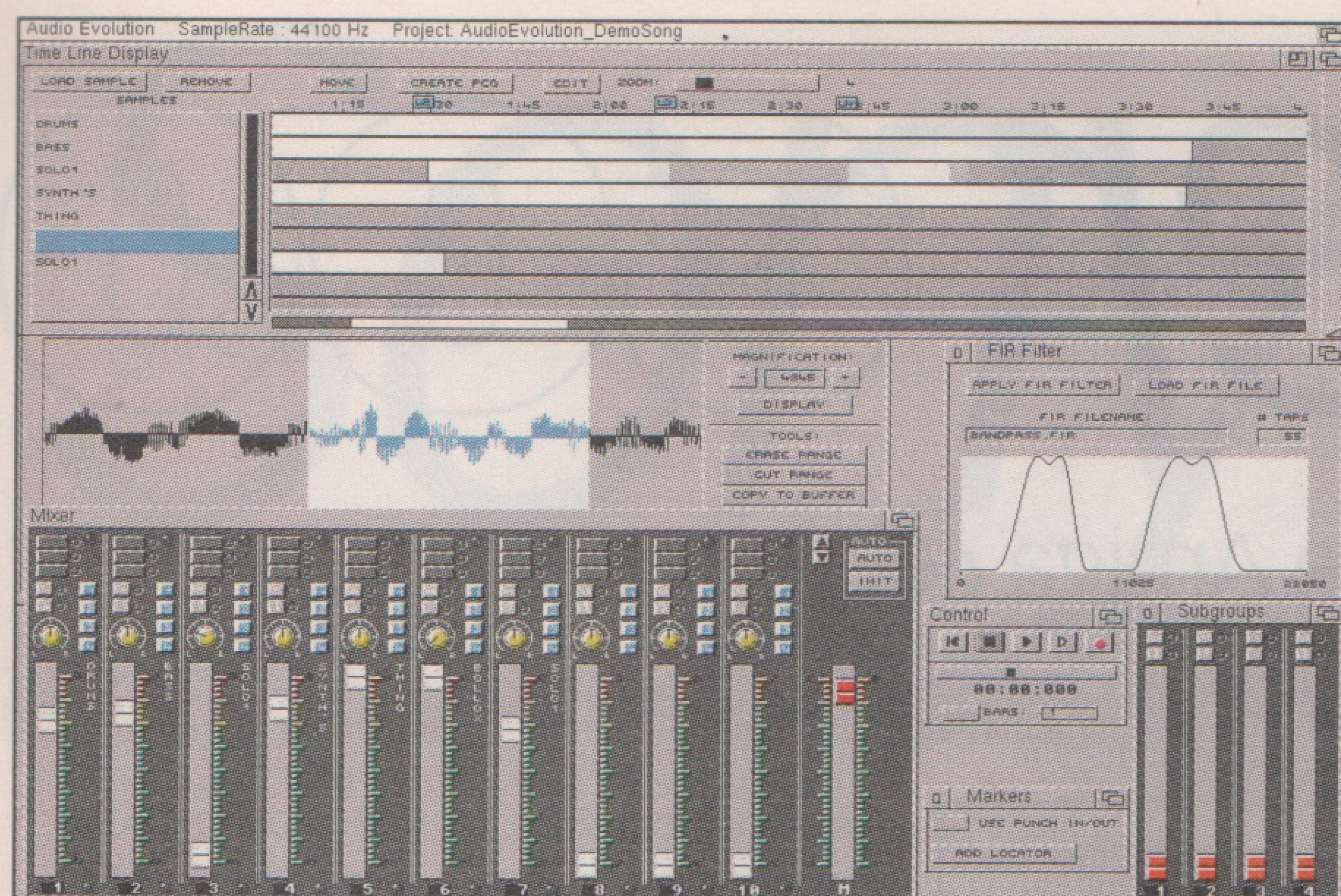
Audio Evolution is on the web at http://www.audioevolution.demon.nl

Audio Evolution can be even more processor-hungry than *Samplitude*. Both gobble up all the power they can get, favouring a 68060 for comfortable mixing of lots of tracks, and PPC for heavy signal processing. They are just about usable on a 6M 68020 or 68030, if you have quick drives, don't need many tracks, and don't mind a long wait for some effects. A 68040 or 68060 with SCSI or accelerated IDE gives a much better impression.

Audio Evolution is a bit more stable than *Samplitude*, but in both cases you need to learn what combinations will and won't work, and the availability of controls depends on what you've already set in motion. Both could do with more "threads" to keep the interface responsive, especially when recording. If you try to reconfigure them on the fly, when you hit 'stop' a host of windows belatedly opens, having been blocked while the packages concentrated on real-time audio streams.

Audio Evolution is retargetable to any screen mode with from 32 to 256 colours, but don't expect to run this on an unlaced TV screen. The package is usable on a Multiscan display, but a graphics card allows more elbow room for control windows and averts aborts caused by running out of chip RAM if you've got several other screens open. The window sizes are disappointingly inflexible, the mixers are fixed-size and the timeline always uses the whole screen.

A fast hard drive is vital; along with your CPU, this determines the number of samples you can mix at any time, from three or four stereo tracks on a 68030/25 with a recent IDE drive, to twenty or more on a 68060 with fast SCSI 2, at DAT or CD sampling rates. You'll need a source of 16 bit samples – you could grab these from audio discs in a CD ROM drive, and monitor with 14-bit Paula output, but most users will have a 16-bit audio card. The 16-bit



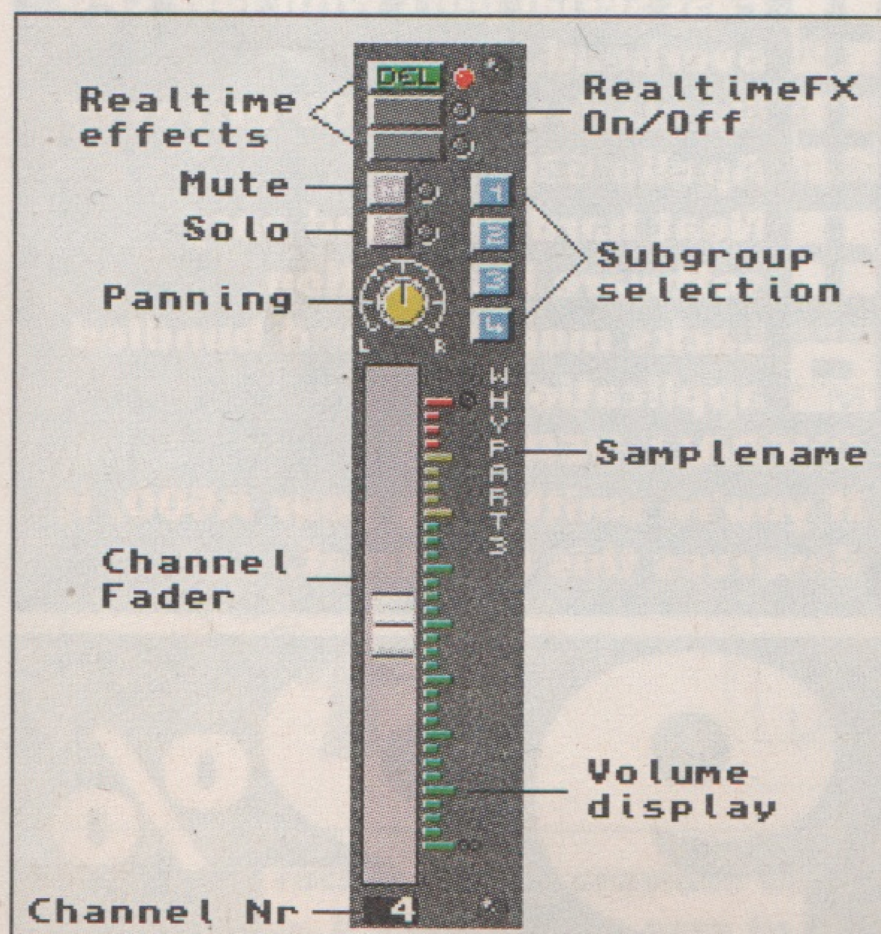
recording facilities in Aura, Concierto and Delfina Lite are rudimentary and leave little time for other processing; this means Prelude, Defina Plus, Tocatta, Draco Motion or WaveTools, or Sunrize boards with the commercial driver.

Recordings are held in standard uncompressed mono or stereo 16-bit AIFF files, so allow about 10M per minute of CD-quality stereo. In theory, the 20-bit Silicon Studio and Soundstage multi-channel Zorro 3 cards could also cope, given a suitable AHI driver, though only in 16-bit stereo, but so far those niche products abjure AHI in favour of custom software.

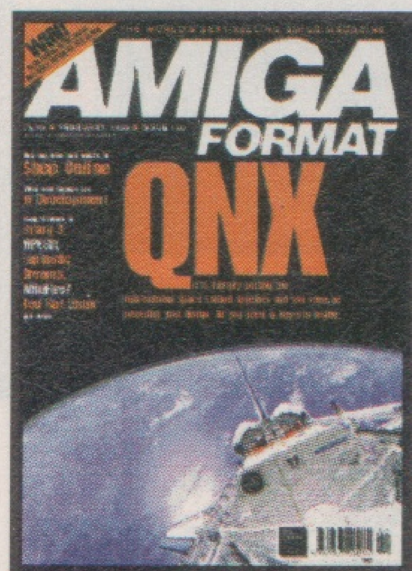
MIXED METAPHOR

Audio Evolution's mixing metaphor is quite effective. There are 30 mono or stereo channels, each with its own fader, buttons and pan-pot, though you can only see ten at a time. The rotary controls work better than you might expect; once a knob has been selected, horizontal movements sweep the control from one end of its travel to the other, without requiring you to describe an arc on your mouse mat.

Buttons can direct output from each input channel to one of four 'groups', just like a real mixing desk. This makes it easy to balance related groups of signals, like vocals or a drum kit, by assigning all those channels to a common group with a collective master fader. Optional buttons at the top of each channel make up for the lack of auxiliary channels or insert points. Real mixers use these to divert signals from a channel to effects units in an adjoining rack. *Audio Evolution* has equivalent software plug-ins; you can assign up to three of these to each channel. This is where a PPC comes in handy. Real time



Audio Evolution is a tight fit on a Double PAL screen.



AF120 (Feb 99) – BVisions finally ship in the UK and Village Tronic announce a Voodoo 1 add-on 3D accelerator for the Picasso IV graphics card. Fully interactive afb launched.

Stereo recording uses a responsive dedicated window.

AF127 (Sept 99) – Amiga announce that the OS partner won't be QNX after all, but will be Linux.

You get conventional controls for up to 30 channels.

effects include compression and gating, basic reverb, reverse delay, several types of tonal equalisation and even tremolo, for that Daniel Lanois production feel!

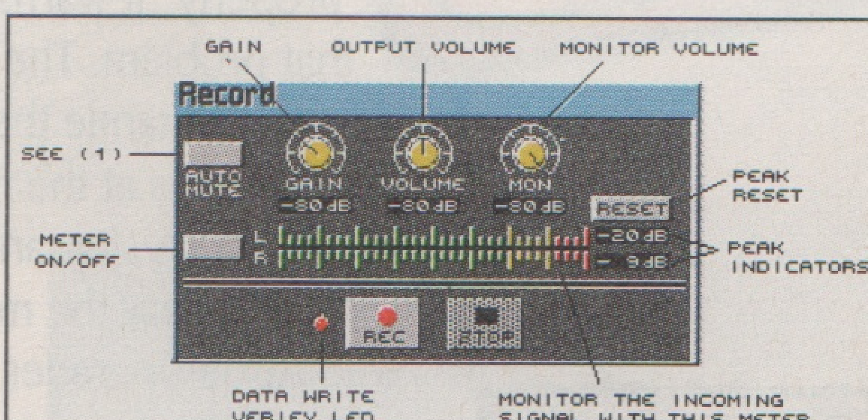
The effects are added live, processor permitting, but controls do not react quite instantly as the signals are processed in short blocks. You can apply one or two effects with a 68040, and a handful with a 68060, but need a PPC to approach the flexibility of a real mixing desk. For more control, you must process the tracks off-line, and mix the modified versions later.

DSP EFFECTS

Step-time effects include delays, noise gating, removal of inaudible sample parts, tonal equalisation and filtering, compression, ring modulation, chorus and level control, plus rather grainy reverb, time stretching and pitch shift effects. There's no equivalent of the noise print or convolution options in Samplitude, nor integrated MPEG or CD support. The quality of these DSP effects falls off at extremes of their control range, but the same is true of many rack-mount gadgets. Let your ears decide!

The time line display works like virtual projects in *Samplitude*, except with just one sample per row. You position mono or stereo tracks on a grid which is scanned from left to right; as the vertical line marking the current time crosses a sample, the appropriate part plays.

You can set ten markers for quick location, and drop points for accurate overdubs. Automation is possible using a list of events, saved with the project or



separately for alternate mixes; at scripted times you can mute, pan or adjust the volume of any sample.

SYNCHRONISATION

Audio Evolution is not a MIDI sequencer but it can synchronise itself with one, either direct to *Bars and Pipes* on the same machine, cabled to any sequencer via the Amiga serial.device, or indirectly via CAMD library, the retargetable MIDI toolkit. An option adjusts for the wobbly timing in some sequencers, so that time code stays in step, but you're limited to "jam sync" as all the samples play at the same crystal-controlled rate and can't speed up or slow slightly like an analogue tape.

The sample editor is quite usable, though less versatile than *Samplitude*'s, or the better 8-bit sampling packages. You can view, cut and paste individual samples in a wide window, with a horizontal scroll bar and preset zoom steps, calibrated in pixels per second. AIFF recordings can be converted to the current sample rate, and stereo ones can be split into mono parts. The editor monopolises the task, stopping



Try twiddling these tone controls with your mouse.

the main menus working while its window is open. It can use pre-calculated graphic files. These hold average sample levels and need only 1/650 the space of the corresponding audio data, giving swift graph updates without rescanning the raw sample.

Compatibility is not assured; in the time available for this review I could not get hard disk replay to work without stuttering on my A4091 SCSI controller and Cyberstorm 1 set-up, even though *AHI record, Play16* and *Samplitude Opus* work well on that system. I was able to play long samples from RAM, vindicating the *Audio Evolution* software, Prelude and AHI combination.

Davy Wentzler's magnum opus deserves recognition, and I'll try this package on other Amigas. Davy has been helpful in providing email support; once you've got *Audio Evolution* playing and recording, the learning curve is not steep, and its potential is limited more by the user's ideas than the implementation.

There are hundreds of possible user configurations and they won't all work first time. Try the demo on the *AFCD* to make sure *Audio Evolution* suits your system. That demo is limited to three stereo tracks up to a minute long, but adequate for test purposes; you can use the spare CPU and disk time as a guide to the amount more that you can do with the full version. That's only available from Computer City in the Netherlands, but they accept Sterling and deliver quickly to the UK; Weird Science are also considering local distribution.

Simon Goodwin

SUPPLIER: Computer City, Zebrastraat 7-9, 3064 LR Rotterdam, The Netherlands
TEL: +31-10-4517722
http://www.compcity.nl
PRICE: £54.95 + £4.30 shipping
REQUIREMENTS: CD, HD, 6M RAM, AHI v4, 32 bit Amiga
Recommended: 16 bit sampler, RTG, fast CPU and drives

Pros and Cons

- **+ Up to 30 stereo 16-bit tracks.**
- **+ MIDI sync and mix automation.**
- **+ Signal processing in real-time.**
- **– Pushes Amiga hardware limits.**

OVERALL VERDICT:
This evolution has been worth waiting for.

79%

SilverSurfer 600

On the CD -In_the_Mag-/Individual Computers

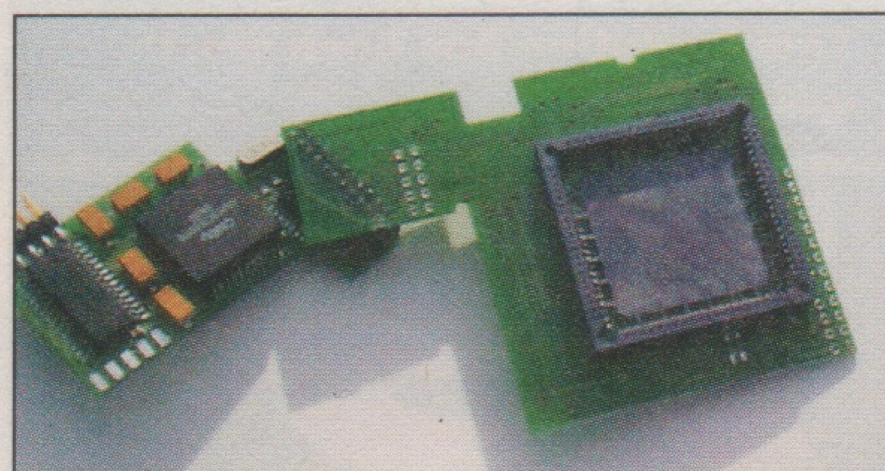
Jens Schoenfeld proves the Amiga 600 is more expandable than we thought

The latest widget from Individual Computers is a tiny green board that makes the A600 compatible with clock-port peripherals manufactured for the A1200. This adaptor is bundled with the SilverSurfer in the UK, giving the smallest Amiga a buffered serial port.

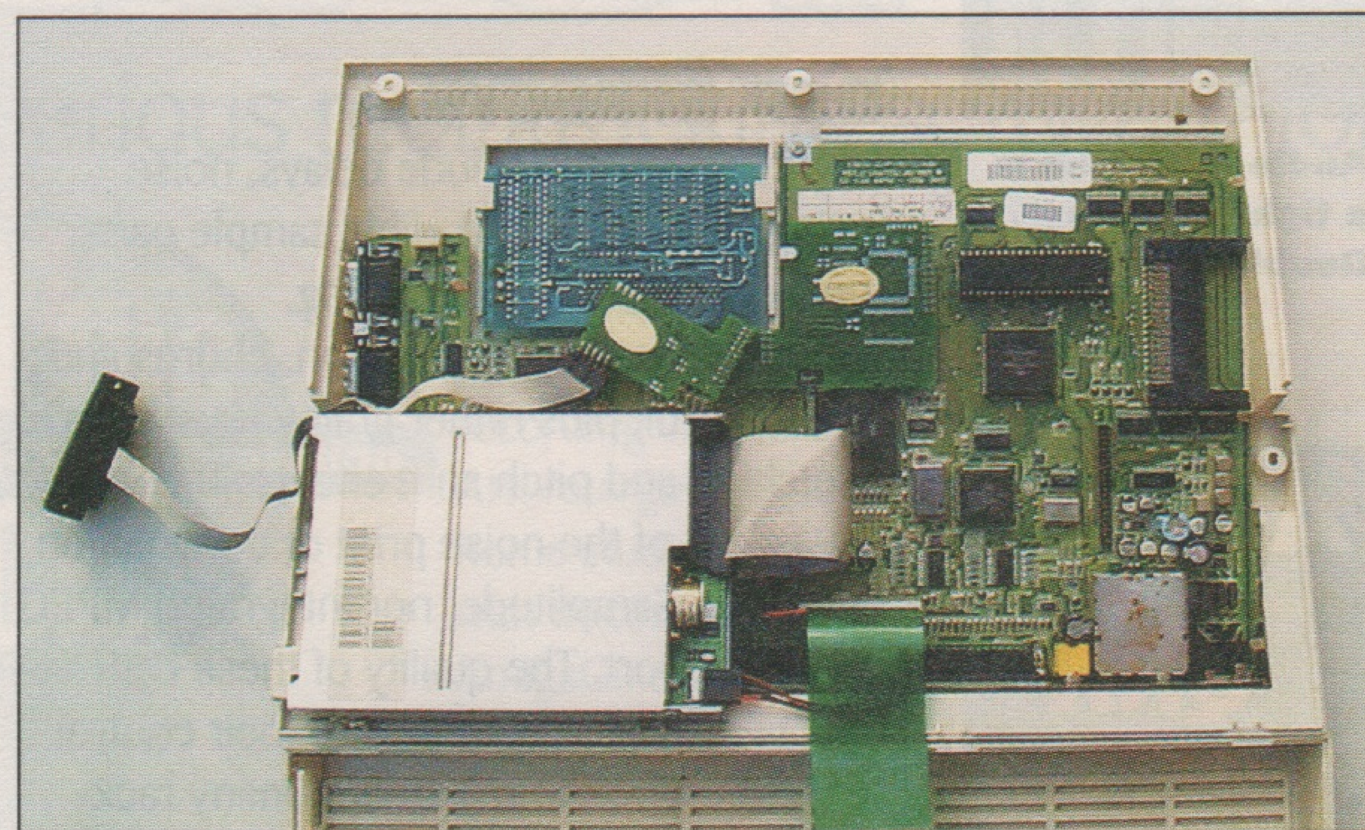
The hardware is capable of rates up to 460,200 baud, but you'll need an Apollo 630 accelerator to approach the 40K per second SilverSurfer can theoretically attain. However, even a stock 68000 should deliver three or four times the throughput of the motherboard port. This interface should keep pace with any dialup connection, as long as the CPU does not get bogged down with GUI or compression duties. The buffered interface is also far more reliable if you're pushing the 16-bit chipset hard, using ECS Productivity mode or HiRes screens with more than four colours.

The A600 adaptor is passive. There's unused space on the board for a buffered interface, or an adaptor to the Individual Computers 26-way proprietary expansion bus, but the current batch just ferries signals from a socket clipped on the back of the Gayle 'glue' logic chip inside the A600 to a clock port electrically and mechanically identical to the A1200 one. By default, there's a standard SilverSurfer plugged in there, as reviewed in *AF130*. The latest driver software recognises the alternative A600 port address. In theory, you can have up to ten Surfer serial and parallel interfaces, though there's barely room for the standard SilverSurfer in the diminutive A600 case.

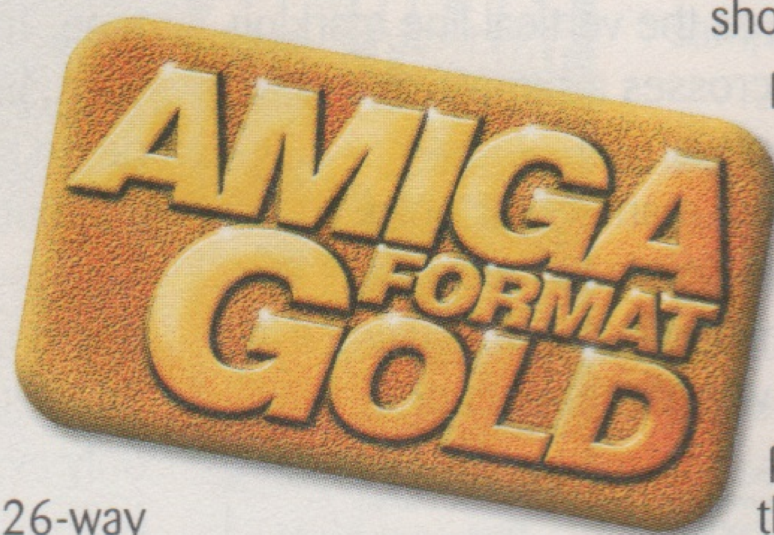
In a towered-up A600 you may be able to fit other devices here, especially if you have access to driver source code. The GoldSurfer offers two fast serial ports and one parallel port – so far that's the only device which has drivers that recognise the A600 expansion adaptor. Catweasel, real time clocks and even 16-bit budget A1200 sound cards are electrically compatible, given software that looks in the right place and suits the rest of the A600, including the default Kickstart 2.05 and 68000 processor.



The A600 SilverSurfer clock port header is twisted 30 degrees to avoid fouling drives or keyboard.



The A600 motherboard with the Surfer and adaptor fitted.



A single A4 page explains hardware installation in the A600. It's clear as far as it goes, with useful notes – for instance Apollo 630 accelerator users might need to shorten the pins on the plug-in oscillator, or put "some layers of thick paper" between the Surfer and that board to avert short-circuits. "Many A600 computers are so old that the Gayle chip must be cleaned with an old toothbrush and alcohol before the adaptor works properly" it warns, though I did not have that problem. The instructions don't say how to dismantle the A600. It's held shut by three screws at the front, one bigger one by the PCMCIA slot, and plastic clips at the back and near the middle on both sides. As with A500 upgrades, resist the temptation to undo the two screws on the back edge, by the floppy drive, and eject any lurking disk before you start.

Once the top of the case is loose you must unplug the keyboard LED connector, next to the mouse socket. You don't need to undo CN13, the main keyboard ribbon. If it comes undone, or you'd rather not, just fold the keyboard back next to the computer, as in our photograph. You need to know that the socket on the board that holds the ribbon is made in two parts. The outer top frame clips the ribbon tail securely when it is pushed down. To remove or replace the ribbon, pull the outer top of the frame up gently at both sides. It's easier if you fold the hard drive temporarily out of the way.

You're advised to put the computer on a "stable surface" before you plug in the adaptor as "you have to apply much force on it, because this special socket is designed to stay in place very securely". If you don't push hard enough, the socket might pop off the Gayle chip later. This happened the first time I tried, rather tentatively, to fit the adaptor.

A vital drawing shows the right way round to fit the adaptor and plug the SilverSurfer into it. It's up to you to find a way to run the narrow ribbon cable out of the A600, from the ten way grid to the 9 pin D-type serial socket. Try to leave the drive and joystick sockets accessible – I ran the lead out between these, but you could otherwise run it from the trapdoor underneath the A600. Remember to reconnect the keyboard lights before you screw the top of the case back.



AF59 (May 94) - We reported that Commodore was making huge losses ($7.8m for the last quarter of 1993). We also report that the CD1200 CD-ROM drive is shown for the first time at CeBIT 94 (it never came out in the form shown).

SOFTWARE

Software installation is simple, if you have a hard drive – just boot from the floppy and the drivers will automatically be copied to Devs: on all bootable partitions. Select silversurfer.device instead of serial.device for all the software you want to divert to the new fast port; floppy-only users must copy this 14K file to Devs: on each boot disk they want to use with the SilverSurfer.

You're restricted to programs that have their own configuration screens. Terminal, Internet and modern MIDI programs are compatible, but not old titles that expect to use the Shell SER: handler, or assume the Commodore hardware or software – most rival add-on ports have similar restrictions.

SilverSurfer earned a good reputation on the A1200, and it's quite an achievement to have it working on the A600 too. This little adaptor makes the smallest Amiga much more useful for modern communications and MIDI applications.

Simon Goodwin

SUPPLIER: Eyetech
TEL: 01642 713 185
http://welcome.to/amiga.world
PRICE: £34.95
REQUIREMENTS: A600

Pros and Cons

- + Fast serial port with low CPU overhead.
- + No clash with A600 drives or Apollo 630.
- + Neat hardware and easy software installation.
- − Lacks mountlist and bundled applications.

OVERALL VERDICT:
If you're smitten by your A600, it deserves this rare treat.

92%

Sony E400

Cheap and cheerful for its size, this monitor may be just what you're looking for

Sony have long been a big name for their superb quality screens, whether they be for TVs or computer monitors. Their Trinitron tube design has been copied all over the world and is widely acknowledged to give the best picture possible at high resolutions.

AMIGA FORMAT GOLD

The one problem has always been that this performance came at a significant cost. However, Sony has realised this and decided to offer their Trinitron-based monitor range, without all the bells and whistles you'd expect from a Sony monitor, at a considerable price reduction. Even so, the single monitor input will be plenty for 90% of users and the picture quality is up to the best of the Sony monitors, so there should be no complaint from anyone. Amiga owners will need to have a scan doubler, flicker fixer or graphics card in order to be able to be able to use it fully (otherwise you'll be limited to the Multiscan screenmode – not ideal).

If you have got a graphics card, this monitor will cope admirably with anything you can throw at it – the stated preferred resolution in the "online" help lists 1280x1024 at 80Hz refresh as the preferred resolution. Talking of which, the controls for the monitor are limited to an on/off switch and a kind of rocker switch under the front panel that acts as an "okay" button when clicked in. This rocker is quite an ergonomic way of working, but it can be hard to click without moving the rocker, especially as the rocker switch isn't set perfectly flat into the bezel.



The Sony Multiscan E400 is one good-looking monitor.

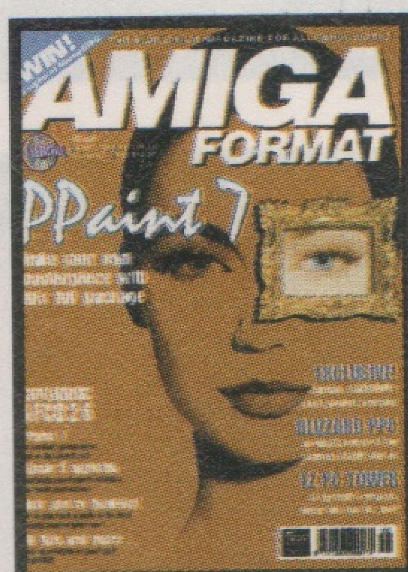
IMAGE CONFIGURATION

As far as the controls go, there are plenty of ways of configuring the image you have on-screen, but unlike the Mitsubishi monitor we reviewed a couple of issues ago, the controls don't seem to affect one another as badly, making this monitor fairly easy to configure. One of the funky things about this screen is the fact that it uses Sony's current completely flat CRT technology. It's so flat, you almost feel that the screen is actually concave rather than flat, presumably because of the fact that we're all so used to screens having a slight bow to them. Even so, now I'm no longer using the Sony, my regular monitor looks like a goldfish bowl!

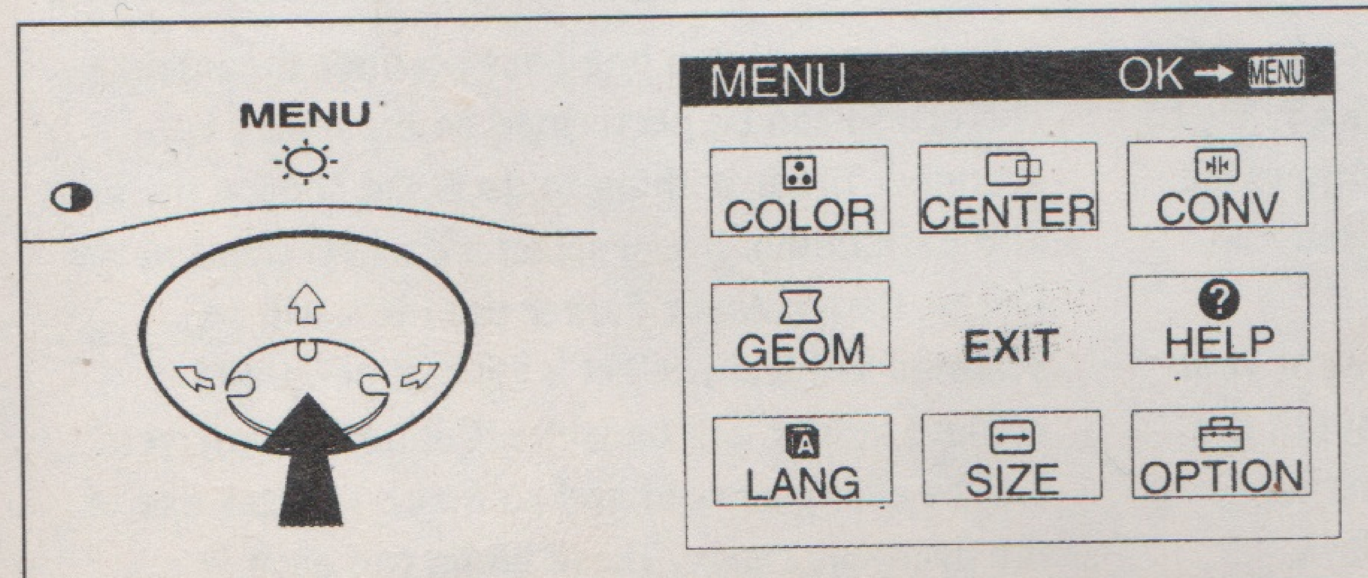
The only other thing that merits a mention is the fact that since this is actually a 19" monitor (in common with most other 19" CRT-based monitors the viewable areaof the screen itself is actually only 18.1"), instead of the 17" we're more used to, the weight of the thing is immense. Lugging all 26 kilos of it around is no laughing matter, so make sure you don't have to move it around too often, for the sake of your back if nothing else!

While some people might be happy to pay the four hundred quid plus VAT for a 17 incher, we know you are a canny bunch of Amiga users. Even so, a price of £470 for this much monitor, especially with that envy-making Sony badge and the phenomenally flat screen it has, is surely a bit of a result.

Ben Vost



AF110 (May 98) – phase 5 announce pre\box – another PowerPC-based Amiga clone.



While the rocker switch provides an ergonomic means to control the monitor, it's not always easy to use.

SUPPLIER: Sony
TEL: (0990) 424424
PRICE: £469 (£399 ex-VAT)
REQUIREMENTS: A means of outputting a 31kHz video signal

Pros and Cons

- \+ Cost.
- \+ Image quality.
- \+ Completely flat screen.
- − Rocker switch not always easy to use.

OVERALL VERDICT: At this price? Racy!

90%

Eyetech scanner

Connecting a scanner to your Amiga needn't be a trial, as this bundle from Eyetech proves.



Technology has progressed significantly since the last Amiga rolled off the assembly line. Consequently, you cannot just buy any old flatbed scanner and expect to be able to use it with your machine; you must consider whether your system has the necessary hardware to interface with the scanner and whether you have any software that can communicate with it.

Aware of these problems, Eyetech have created an all-in-one bundle that provides a complete scanning solution for the Amiga 1200 with a minimum of fuss.

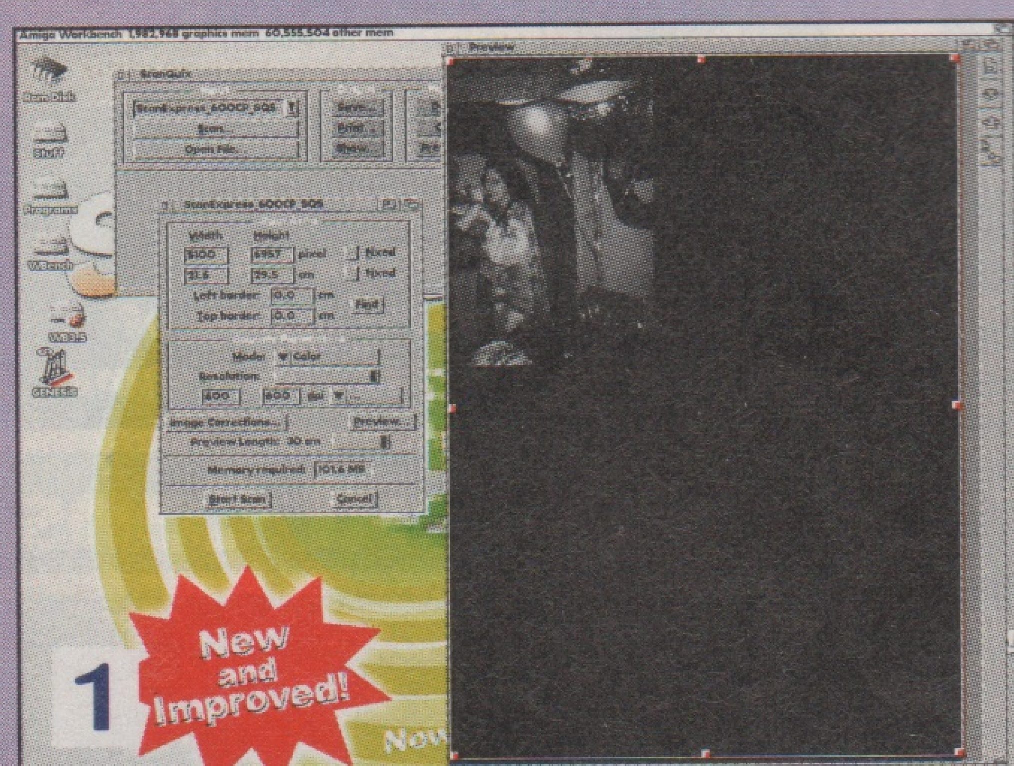
Eyetech's bundle consists of the Mustek 600CP parallel scanner, the IOBlix1200 parallel card, parallel cable and *ScanQuix5*. The IOBlix card is necessary because the scanner requires an Enhanced Parallel Port (EPP) – a protocol that the standard parallel port of current Amigas is not able to provide. However, *ScanQuix5* will also support the same scanner with the ZorroII version of the IOBlix, although not via any other add-on parallel card.

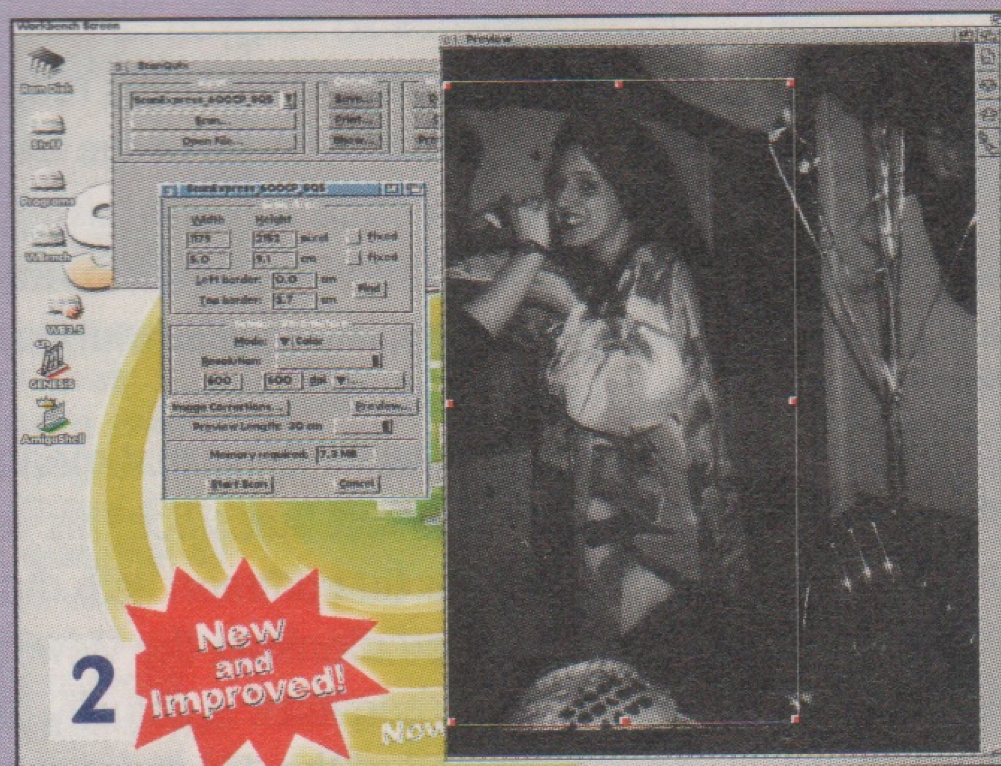
The 600CP is a fairly basic A4 flatbed scanner, but quite suitable for home use. Its single-pass CCD can provide an optical resolution of 300x600 DPI in either monochrome, 256 shades of grey or true colour. As an example of the image quality

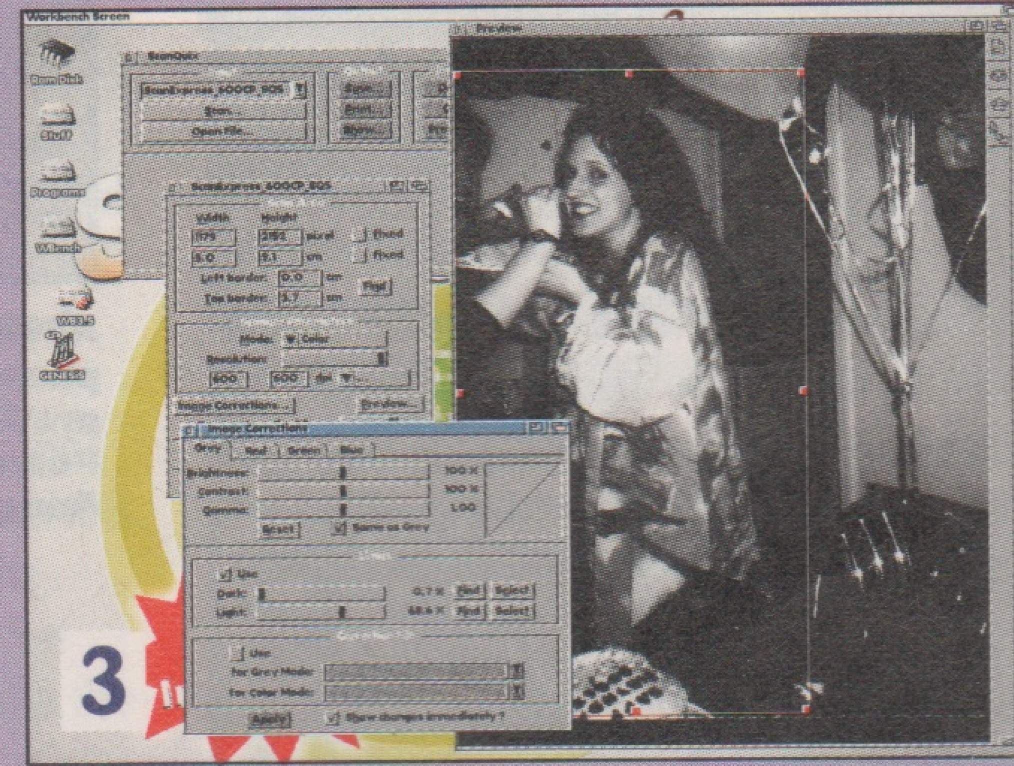


Eyetech's Mustek scanner wins the last ever Amiga Format Gold award.

A QUICK GUIDE TO SCANQUIX







1 Place the image face down on the scanner and close the lid. Click the Scan button on the ScanQuix interface to open the scanner driver window.

You'll probably want to do a preview image first, so click the Preview button. The scanner will do a quick lo-res pass of the image which will be displayed on screen.

2 You'll probably won't need the whole A4 scan area, so next choose the size of the scan. If you click the Find button in the Scan Area section of the main window, the software will automatically try to work out the size of the image for you. Otherwise, just drag the size of the box manually in the preview window.

Once you have chosen the size you want your image to be, you can then zoom in and out of the picture and rescan the selected area with the buttons on the right of the preview window.

3 If you are using a one-pass scanner the image correction can be performed as the image is scanned. The first thing to do is the choose the light and dark limits. If you select a darkest point in the image, then colours darker than this will be scanned as black; select a lightest point and colours lighter will be white. Colours in between will be evenly spread and so make a better use of the available range. These limits can each be chosen manually – by clicking Select and then

possible, have a look at the photographs in our Farewell feature: most of these were imported with this very Mustek scanner.

The blurb that Mustek peddle for this scanner claims that it is capable resolutions of up to 9600 DPI in software. This is rather a sleight-of-hand and, anyway, not a very meaningful figure to quote. These resolutions are achieved by interpolation: that is, a mathematical function is used to fill in pixels of 'average' colour between existing pixels. The more you do it, the more the image quality degrades. Hence, it's not particularly useful for images that are to be used on screen.

Also bear in mind the prohibitively large amounts of memory required for high resolution images (a full A4 scan in true colour at 600DPI requires 100MB). You needn't feel left out on the Amiga, however, because *ScanQuix* can scale or interpolate during scanning to arbitrary resolutions from 12 to 20000 DPI. Choosing one of the scanner's fixed resolutions will result in much faster scanning, though.

THE DRIVING SEAT

The *ScanQuix5* package is comprised of a device-independent driver system and a selection of client software which uses that system. The drivers provide a common interface for both applications software and the user to control and use a scanner and are somewhat similar to AmigaOS's printer drivers. A ScannerPrefs tool is even provided where you can select which is your preferred scanner and by what interface it is attached to your machine.

All programs which use the *ScanQuix* system present the user with the same GUI for to select the scanning options. Here you can choose to do a preview scan, choose the area to be scanned, select the resolution and colour mode of the final scan and configure what, if any, colour correction is applied during scanning – see the boxout on this page for an overview of the scanning process.

The driver interface is rather spartan, but at least it's reasonably clear and is quick to use (some form of on-line help would make the system much easier for the novice, however). In practice, I found it much faster and that it gives better control than Windows software that is shipped with the Mustek scanner.

With *ScanQuix*, you preview your scan, zoom in, do some colour correction and bang, there's your image. Even with a 350MHz Pentium II, the software crawls under Windows, taking an aeon just to redraw the screen. Chalk up another point for the Amiga in the productivity stakes.

Now the applications. The main *ScanQuix* program is a simple client which makes use of the *ScanQuix* drivers and permits images to be scanned, viewed, printed, and exported as IFF or JPEG files. Multiple images can be stored and manipulated in memory and a limited amount of processing can be applied such as colour correction and changing image resolution. It is quick to use, if a bit crude. It could do with at least a decent crop tool being added, and filters to blur, sharpen and remove red-eye. More adventurous effects should be applied with a dedicated package such as *ImageFX*.

Other *ScanQuix* clients are *ScanToDisk* – a program which does exactly what it says and allows you to scan images that are larger than your available memory by writing them directly to disk – and *PhotoCopyPro* – a program to duplicate a scanned image directly to your printer.

Also on the CD are plug-ins for various third-party applications such as *ImageFX*, *Photogenics* and *PPaint* and will allow these packages to import images from a scanner using the *ScanQuix* system. As a bonus, a special edition of Felix Scharz's *fxScan* is included. This program uses the *ScanQuix* drivers and provides a scanning environment that is much prettier and clearer than the main *ScanQuix* application, can load and save more image formats and has more image processing functions but it is limited to handling one image at a time.

HAPPY ENDING

I have to say that I am impressed with Eyetech's scanner bundle and I didn't think I would be. The Mustek scanner, while not state-of-the-art and not particularly fast, produces more than adequate image quality. But, most of all, I was delighted with *ScanQuix5*. It's so reassuring to see Amiga software that stands up above its Windows counterparts. Yes, it's incredibly utilitarian, but the scanner driver provides all the functions you need. And, okay, the main *ScanQuix* application itself is rudimentary, but then it's not meant to be a replacement for a full-on image-processor.

£150 is a lot of money for a basic scanning package, especially if you consider that for a PC you would need only pay for the scanner itself. But *ScanQuix5* is a more adept and useful package than the run-of-the-mill PC software shipped with most scanners – and the price includes the IOBlix card, too. It's just unfortunate that Amiga users always have to pay a premium for putting their machines to work.

Richard Drummond

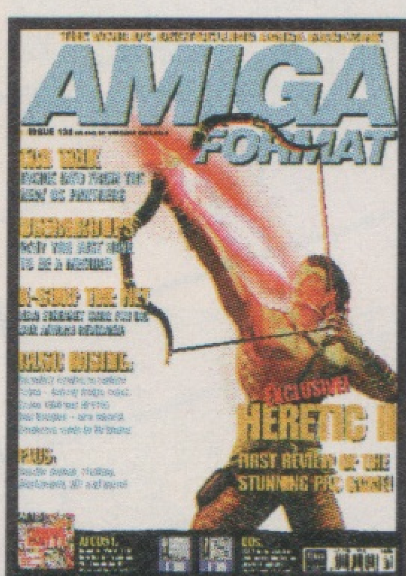


MORE ON SCANQUIX5

I could go on talking about *ScanQuix5*'s features all day. Did I mention that it supports *WarpUp* to give a performance boost on PPC machines, or that its documentation is excellent and supplied in HTML format, or even that it can integrate with the Wolf Faust's *ICS* colour management system so that the colours you see on screen match those of your source image...



AF131 (Xmas 99) – IBM announce that it will make its PoP motherboard freely available to developers. OS3.5 released and reviewed.



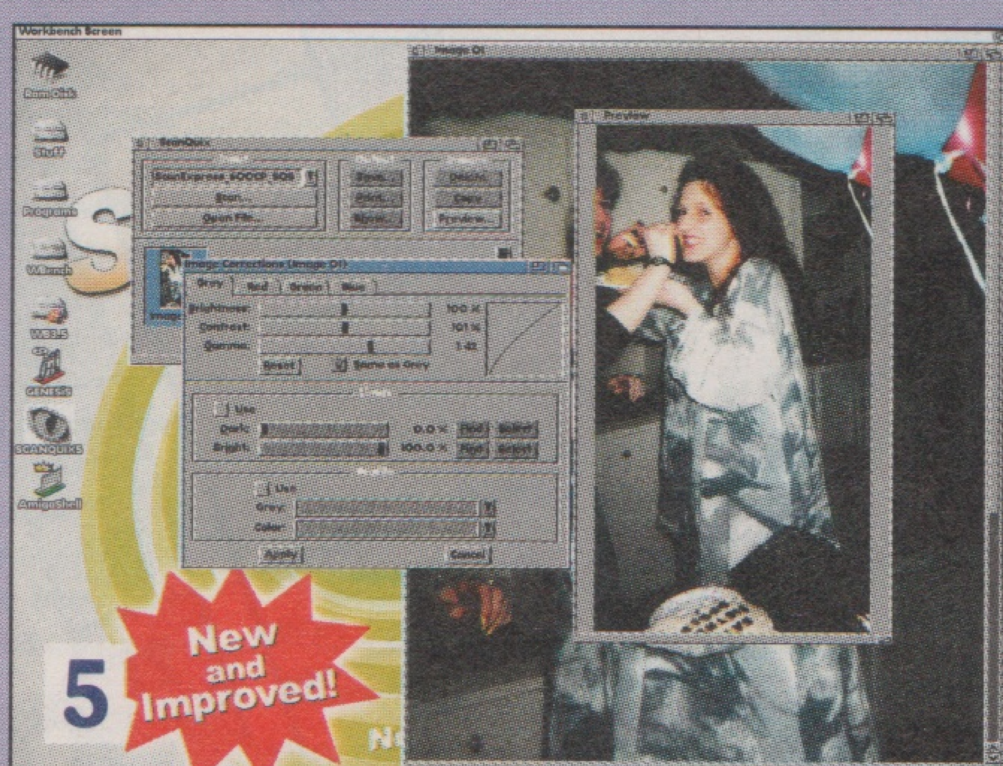
AF135 (Apr 00) – phase 5 finally declare bankruptcy.



picking a point in the preview image – or automatically by hitting Find. You may also adjust the brightness, contrast and gamma correction of the image as a whole, or individually for red, green and blue components.

4 You are now ready to do the full scan. Make sure you have the desired scan resolution and mode selected in the main window and then hit Start Scan gadget.

Scanning can be aborted with the Abort button on the progress bar that appears. With Mustek, however, the mouse pointer is periodically locked – allegedly to improve parallel communications. This screenshot shows the finished scan.



5 You can now perform whatever post-processing you like. This image has been lightened to better match the original photograph by applying gamma correction.

For more complex effects a dedicated image-processing package should be used.

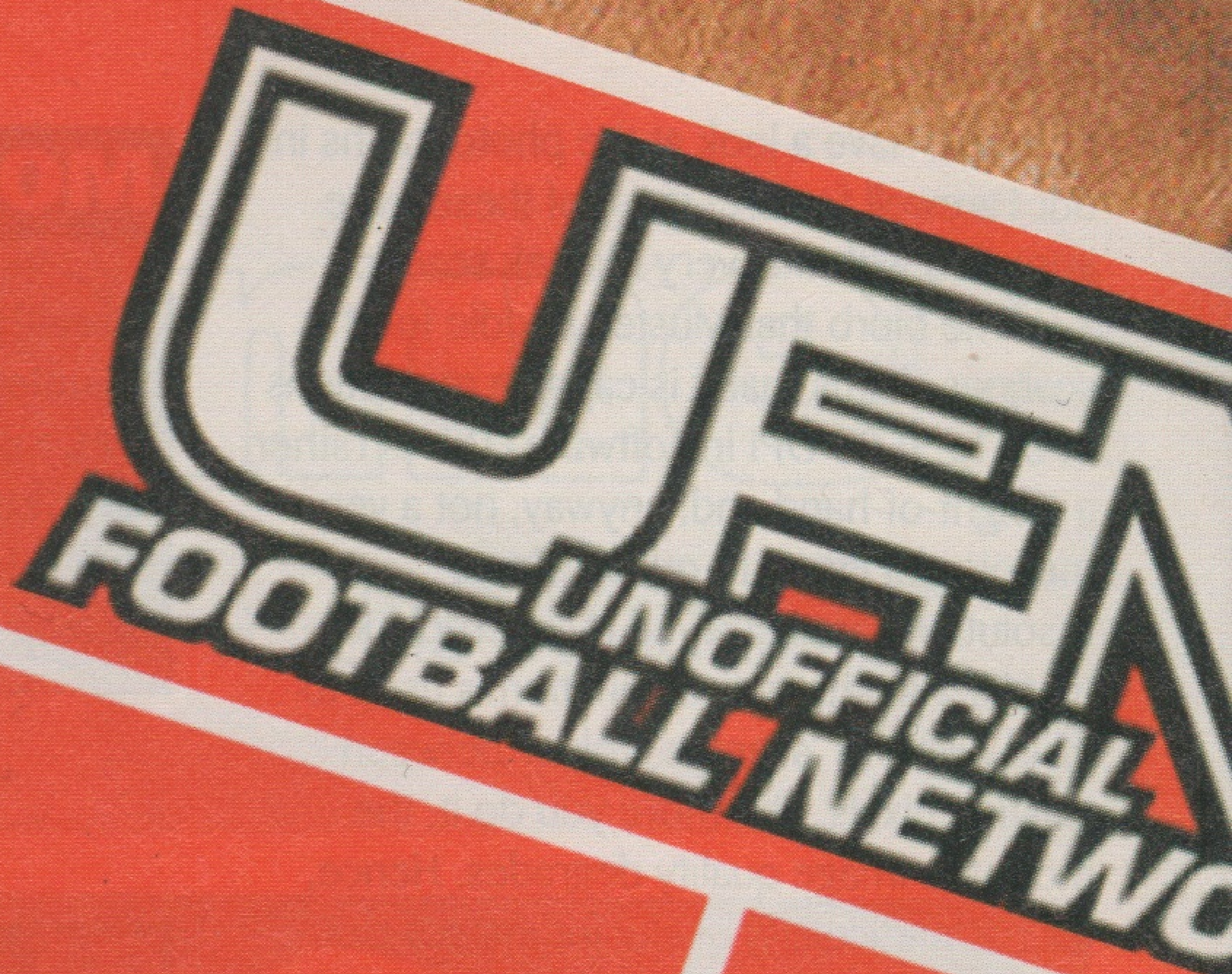
SUPPLIER: Eyetech
TEL: +44 (0)1642 713185
http://www.eyetech.co.uk
PRICE: £149.95
REQUIREMENTS: OS3.0, 68020 and 6M RAM (faster processor, more memory and a gfx card recommended).

Pros and Cons

- + Easy to install and use.
- + ScanQuix software incredibly flexible.
- + Plug-ins for your favourite art software.
- − Parallel communication slow for large scans.

OVERALL VERDICT:
A great place to start for scanning on an A1200.

90%



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1/27	DCFC World
1/27	Evertonia
1/27	ExeWeb
/27	Fantasy StockMarket Soccer
27	Feeling(s) Blue
7	Football Talk
	Forest Fire
	Heroes and Villains Net
	IronNet
	Knees up Mother Brown
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27/54	Spurs Unofficial Homepage
27/54	Spurs Update
27/54	Square Ball Fanzine
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27/54	Stockport County Unofficial Web
27/54	Swansea City AFC
27/54	Talk of the Tyne
27/54	The Blues
27/54	The Cobblers
27/54	The Discerning Eye
27/54	The Online Gooner
27/54	The Red Devils Homepage
27/54	The Sky Blue Superplex
27/54	The Villans
27/54	There's Only One Vale Fan in Bristo
27/54	Unofficial Arsenal Site
27/54	Unofficial NUFC Pages
27/54	Villa Web

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Hot tips
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Punchinello Mouse Wheel extension



Punchinello does a wheelie with this low-price add-on from Power Computing

Punchinello is an adaptor for PC serial mice that compared favourably with other serial mouse solutions when reviewed in *AF129*. There was no need for a software driver and it worked with hardware banging games and the early startup menu – crucial for compatibility with old programs. The only thing it lacked was support for the 'mouse wheel' between the buttons of the latest serial mice.

A mouse wheel can work like a third button. Punchinello supports that function in a manner compatible with genuine three-button Amiga mice but the wheel gives a further dimension of control – you can make adjustments independently of the mouse pointer position by rolling the wheel back and forth. Amiga applications were not written with this in mind but our modular operating system makes it simple to add wheel control to most programs.

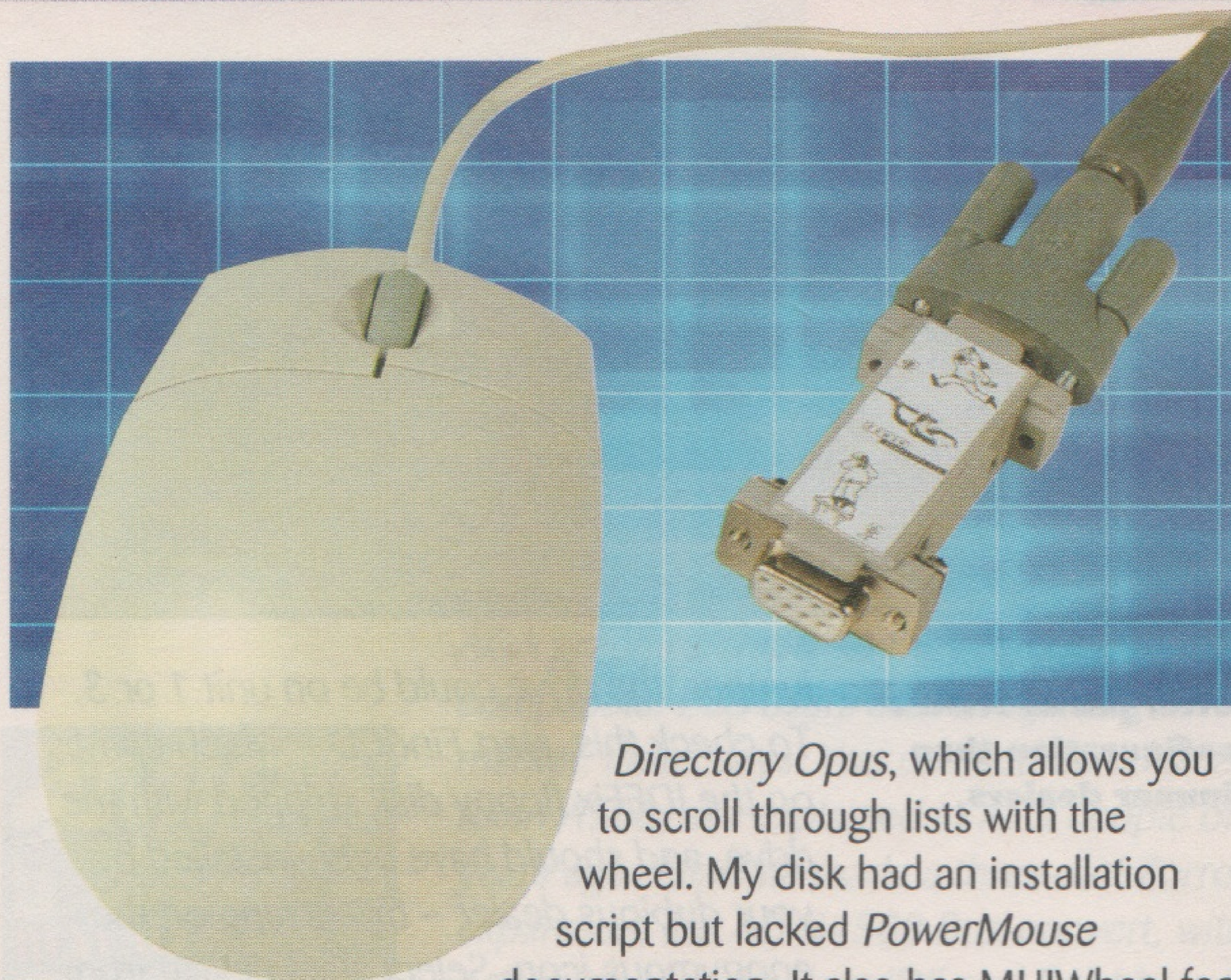
HARDWARE

In theory, the mouse wheel movements could be sent through one of the Amiga's analogue inputs, designed for proportional controllers. In practice, Power have kept the software options simple and diverted the serial data stream from the mouse to a serial port. Punchinello works normally, providing the functions of a three button Amiga mouse, but an extra lead augments that with serial data.

The additional MouseWheel hardware is a pair of nine pin D-type sockets, wired back-to-back, and a short captive lead to a standard 25 way D-type serial plug, like that on the back of the Amiga motherboard. The supplied cable fits A1200s and A500s neatly enough, though it sticks out six inches at the back of the machine, and monopolises another port. It was too short to bridge the gap between A600, A3000 and A4000 motherboard ports, so warn Power if you own one of those systems.

SOFTWARE

PowerMouse is a Power Computing remix of Alessandro Zummo's *NewMouse* software. This works with wheel-aware applications, including the latest version of

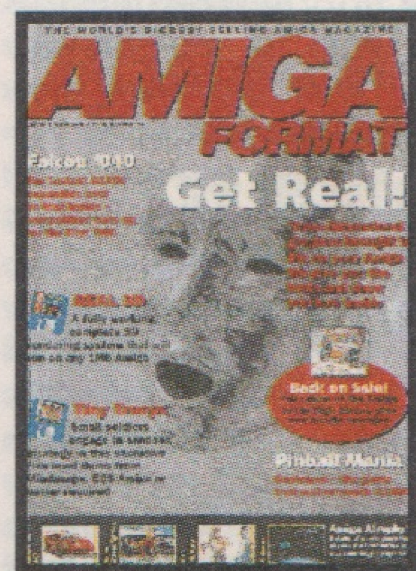


The string of adaptors protrudes 15 cms from your controller port.

Directory Opus, which allows you to scroll through lists with the wheel. My disk had an installation script but lacked *PowerMouse* documentation. It also has MUIWheel for wheel control of programs using the MUI scroll class. This moves the big listviews in *IBrowse* and *YAM 2* nicely. The mouse wheel has click detents, and each works like a click on the scrollbar arrows. Web pages and cycle gadgets also respond as the wheel turns when the pointer is over them and you can move the cursor with the wheel when editing text.

The MUI demo *Slidorama*'s knobs, sliders and numeric buttons all react well. It's more useful than you might expect, though you might wish for a horizontal wheel as well as the vertical one. Virtual groups move up and down as the wheel turns with the pointer over them, or sideways if it's over the horizontal scrollbar.

Aminet has other relevant hacks. *FreeWheel* is a commodity which converts wheel mouse events into cursor key or scrollbar movements. It works with vanilla Gadtools applications but not *ClassAct*, *BGUI* or *MUI* sliders, or the non-standard KingCON scroll gadget. But *FreeWheel,* on the *AFCD*, elegantly scrolls Multiview, Workbench windows, directory and file views in *Opus4*, *DPaint* images, display modes and information, and text in *Devpac* and *Final Copy*, independent of the cursor. *Freewheel*'s GUI options let you depth-arrange windows, emulate shift or cycle screens if you press rather than roll, the wheel. It even supports a fourth button, though the Vivanco wheel mouse Power supply does not have one.



AF77 (Nov 95) – The first Escom A1200 bundle is launched. They promise Scala MM300 with the hard drive version, but nothing has been done about the fact that a standard A1200 with a hard drive doesn't have enough memory or power for the package, even though a bundled accelerator has been promised.

COMBINATIONS

It's cheaper to keep your normal Amiga mouse and add a PC serial mouse and PD software on a spare serial port for when you really need extra control; you can use both at the same time, but Punchinello lets you dispense with the Amiga mouse completely. The wheel adaptor and disk cost £4.95 extra, but the combination costs three times more than adding a cheap wheel mouse to a standard configuration. The difference is far less if you opt for a Logitech mouse or trackball.

Punchinello's simplicity earned a deserved Format Gold award – using a generic PC mouse and one standard Amiga port, with no need for drivers or software installation, and negligible risk of hardware misfits. The wheel extension is handy once it's set up, and driver installation is straightforward. It does even more, but not quite as elegantly as Punchinello alone.

Simon Goodwin 

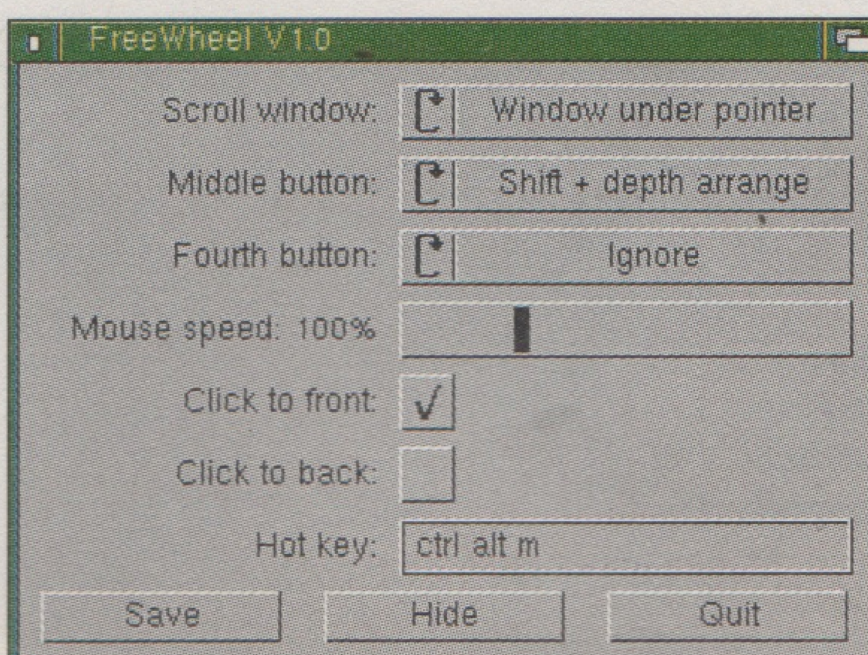
SUPPLIER: Power Computing, 82a Singer Way, Woburn Road Industrial Estate, Kempston MK43 2JK
TEL: 01234 851500
http://www.powerc.co.uk
PRICE: Punchinello alone: £14.95, Wheel enable: extra £4.95, Logitech mouse or trackball: £29.95, Vivanco wheel mouse: £14.95, Punchinello and wheel mouse: £24.95

Pros and Cons

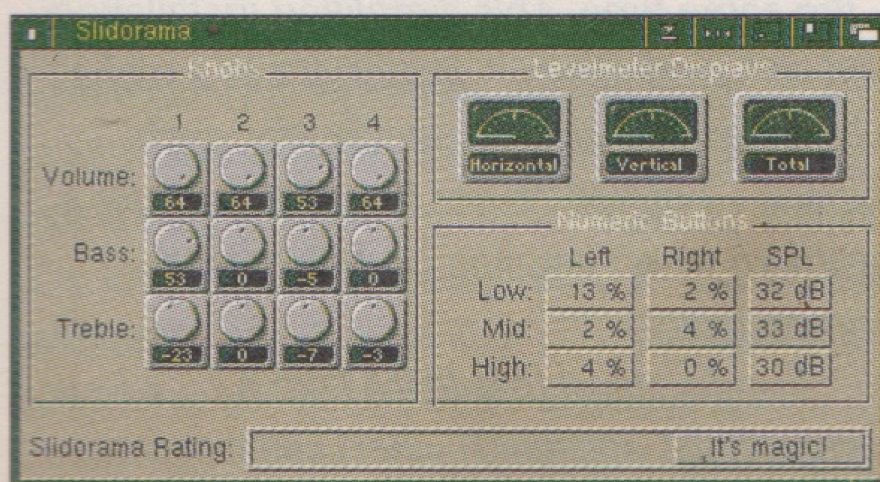
- \+ Adds an extra dimension to mousing.
- \+ Very effective with MUI applications.
- \+ Aminet support for Gadtools scrolling.
- − Needs drivers and serial port installation.

OVERALL VERDICT:
Inessential but surprisingly compatible and useful.

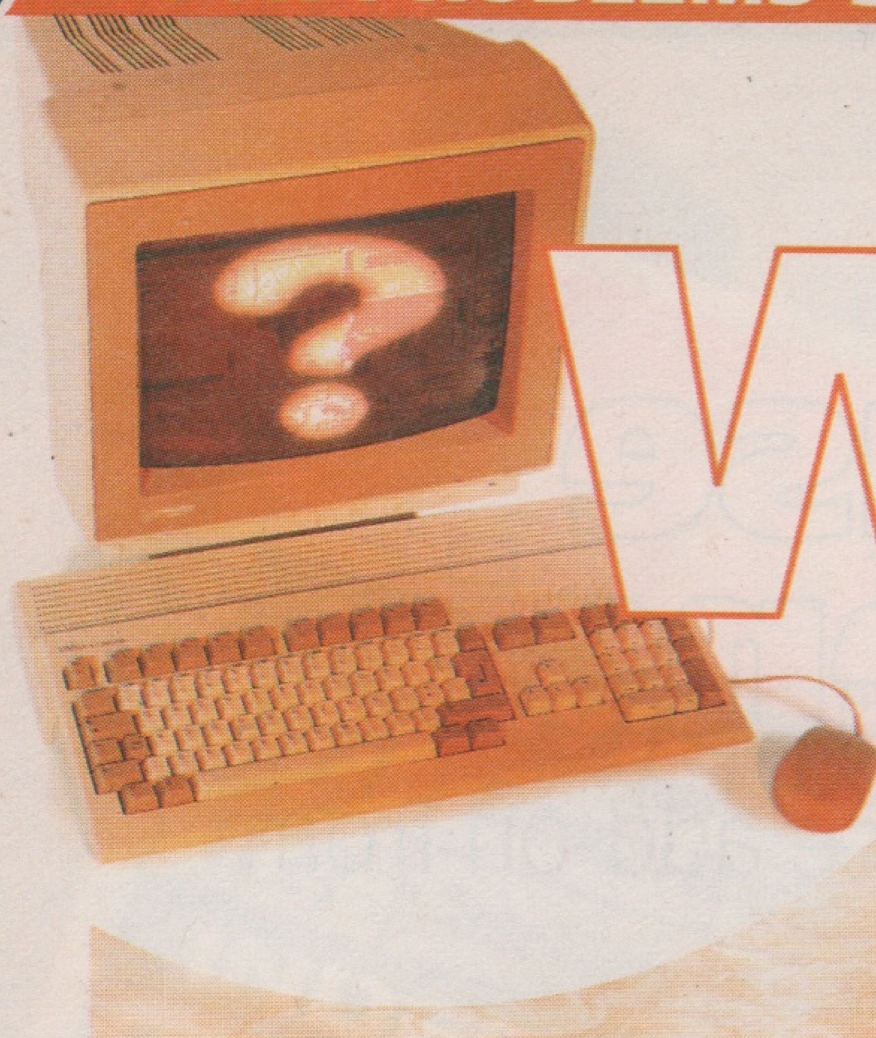
86%



FreeWheel gives the wheel useful control over non-MUI applications.



Slidorama MUI demo gadgets respond well to the mouse wheel.



Workbench

On the CD -In_the_Mag-/Workbench

Dollops of expert balm dispensed to soothe your nagging questions. Massage it in well though, 'cos that's your hopping pot

DODGY DEALING

My Amiga has an Apollo Turbo 040 accelerator with 16M RAM, 340M hard drive, external floppy and Power Computing 8x CD. The CD drive was fitted by a local dealer, and since then on booting up I've always got the message "cannot open tandemat_pcmcia device Unit 41". If I'm lucky enough to be able to click on the Abort box, the computer boots as normal, but if I miss, then all my NewIcons become black and white and also my backdrop. After numerous attempts he was unable to rectify the fault, so I'm hoping the real Amiga experts can provide the answer.

Bob Conroy
Accrington

The Workbench colours go awry if you didn't click on Abort because the default four colour screen was opened to display the alert before your own custom configuration had been set up. If you respond to the alert before your startup reaches the LoadWB line, the screen mode gets updated – otherwise the drab OCS-friendly default remains in force.

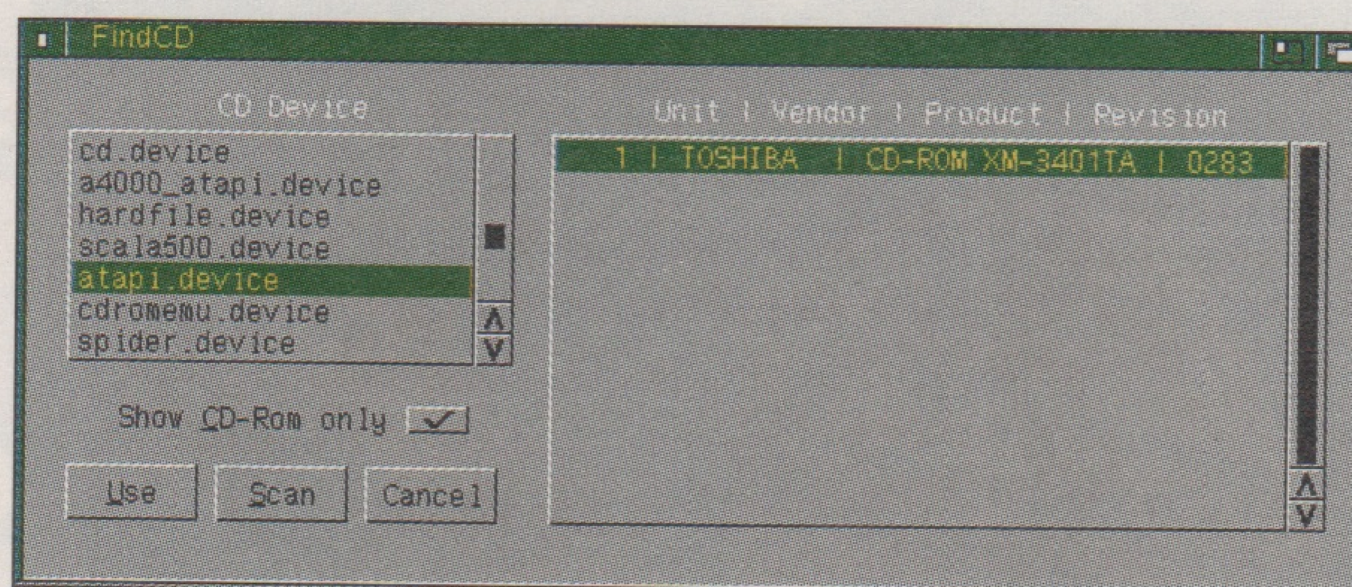
Your local dealer seems incompetent. Tandemat_pcmcia.device is for the Tandem PCMCIA interface, and Power Computing's Toni Ianiri assures me that the 8x CD drive comes with IDEFix97 and an internal four-port interface. The device name should be atapi.device – no capitals, and don't forget the dot – and the unit number should be something between 0 and 3. How the dealer expects anyone to have 42 drives on one IDE interface is a mystery!

To fix the device name and unit manually, look for the CD icon in Devs:DOSDrivers, and edit the device and unit lines in the corresponding text file to refer to the correct name and unit. The unit number depends on the connection to the interface, but normally it's 2.

Even numbers are for 'master' devices, odd numbers for slaves. Unit 0 is your internal hard drive. Unit 1 would be a slave on the same cable, and the Power drives are shipped configured as masters, so normally they're plugged into the secondary connector, which handles units 2 and 3. To switch the CD-ROM from unit 2 to 3 you'd move the jumper away from the cable at the back of the drive, thus selecting slave rather than the default master configuration.

If the dealer has messed with this jumper, the drive could be on unit 1 or 3. To check this, start FindCD – which comes on the IDEFix floppy disk shipped with the drive, and should have been installed by your dubious dealer – by clicking on the eponymous icon. Select atapi.device from the list headed "CD device" on the left side of the FindCD window. The name and unit of your drive should then be displayed on the right.

If you can't find FindCD, or it does not list atapi.device, the IDEFix software needs to be reinstalled from the floppy. This will automatically run FindCD after copying the right files to your SYS: partition. Select atapi.device and the drive details will appear, as long as it's correctly connected. Click on those details, and you're sorted!



FindCD does a better job of ATAPI configuration than dimmer dealers.



AF45 (Apr 93) – The first A1200 bundle is launched. The Comic Relief pack has a special edition of AF, Sleepwalker and... well, that's about it actually. DOpus 4 gets a 98% score and a comment "...it should have been built into the operating system!". Seven years on and it still hasn't been.

MUSTEK SCSI

My Amiga 1200 is in an Elbox/Power tower, with 26M RAM, a Typhoon Mark 1 accelerator, Plextor 32x SCSI CD, Iomega internal ZIP100, 1G IBM SCSI and 4G Seagate IDE hard drives, Z4 slots and Hypercom 4+ expansion. A Mustek 6000SP was connected to an external SCSI port on the back of the tower.

When booting all goes well up to the point when it would normally execute IPrefs. Instead I'm greeted with a guru indicating severe memory problems. Repeated booting does not change anything, but when the scanner is removed and the SCSI bus is properly terminated, the computer boots as normal.

Conclusion: either the scanner is not suitable, or the combination of scanner and Typhoon does not work. I'm willing to sell that Mustek off and buy an Epson or even an HP. But that requires me to buy a new copy of ScanQuix, as the drivers I got only cover the Mustek range. Help!

Tjitte de Wolff
Netherlands

This is a tiny extract from Tjitte's letter, which ran to several hundred lines and could have filled this column. It was a good read, but took a while to reach me as it was not addressed to Workbench, and those who send lots of questions may not get the most important ones answered.

I agree with your conclusion. The Typhoon SCSI is solid, but Mustek's is not. They have a 'cheap and nasty' reputation and Power only sell them with the similarly minimal Squirrel. It sounds as if the scanner is getting confused because the Typhoon controller is pushing it into territory it can't handle, expecting the full SCSI standard rather than a subset.

The Epsons are optically, mechanically and electronically much better, and they're what Power sell with Typhoons: "100 per cent SCSI", as Power put it. I'd sell the Mustek to some unsuspecting PC victim who won't know any better, and trade up to Epson or HP. Those reputable brands will suit your Typhoon fine.

Your problem with ScanQuix is harder to resolve. As you've found, until recently RBM bundled ScanQuix with drives for just one model of scanner, to suit the hardware sold at the same time. This simplified installation and reduced piracy – important in a niche when fresh funding is needed for each variant – but you're not the first to find it a problem when juggling parts for best compatibility.

I understand that RBM take a sympathetic approach when customers



The Mustek 6000SP scanner.

approach them with problems like yours. Email Bernd Rudolf, br@rbm.de, and explain the circumstances, and I expect you can come to an arrangement involving them and your dealer, so that everyone ends up happy.

The latest ScanQuix version 5 is shipped on CD, and includes all the drivers. The upgrade costs £34.95 from Eyetech. You'll get with a better program and plenty of choice of hardware support. There are PD and shareware scanner programs on Aminet and AFCD52 which might also fit the bill – ScanTrax and BetaScan support HP and Epson models.

A500 DEVOTEE

My dear computer is an A500, with the Viper520CD and the AlfaPower Plus. I have two 32x CD-ROM units and a Traxdata CDRW2260 CD-Writer. For storage I have a hard disk of 4.3G and another of 850M. The ROMs are Kickstart 3.0 on Viper520CD and 1.3 in the A500, with 1M of chip RAM in total on the trapdoor and motherboard. I also own an AMD k6 II 300 PC that I only use to play MAME.

I have a serial 9-pin PC mouse I want to use with the Amiga. I have created the necessary interface in the SerMouse2.21 documentation, but it won't work. I have revised the interface, and the mouse works on the PC. What is the problem?

My Viper520CD is configured as 8M of 32 bit fast memory, but I also have a 4M SIMM in the AlfaPower. If I put that in the system doesn't recognize it and a test program informs me that it is faulty. Yet if I disable the Viper520CD RAM the system uses this SIMM as 16 bit fast RAM. Why can't I use the memory of the AlfaPower? Is it a problem of the AlfaPower ROM, or does the Viper520CD limit me to 8M maximum?

How I can add a Zorro II Slot at my A500 without losing the AlfaPower and the Viper520CD? Do any graphics cards exist (not Graffiti, please) for the A500 that don't need a Zorro slot? Can I use the IDE Express or the new EIDE ' 99 in the AlfaPower? What type of external Scan Doubler can I use in my A500? And where I can find a PGA 33 Mhz FPU for the Viper520CD?

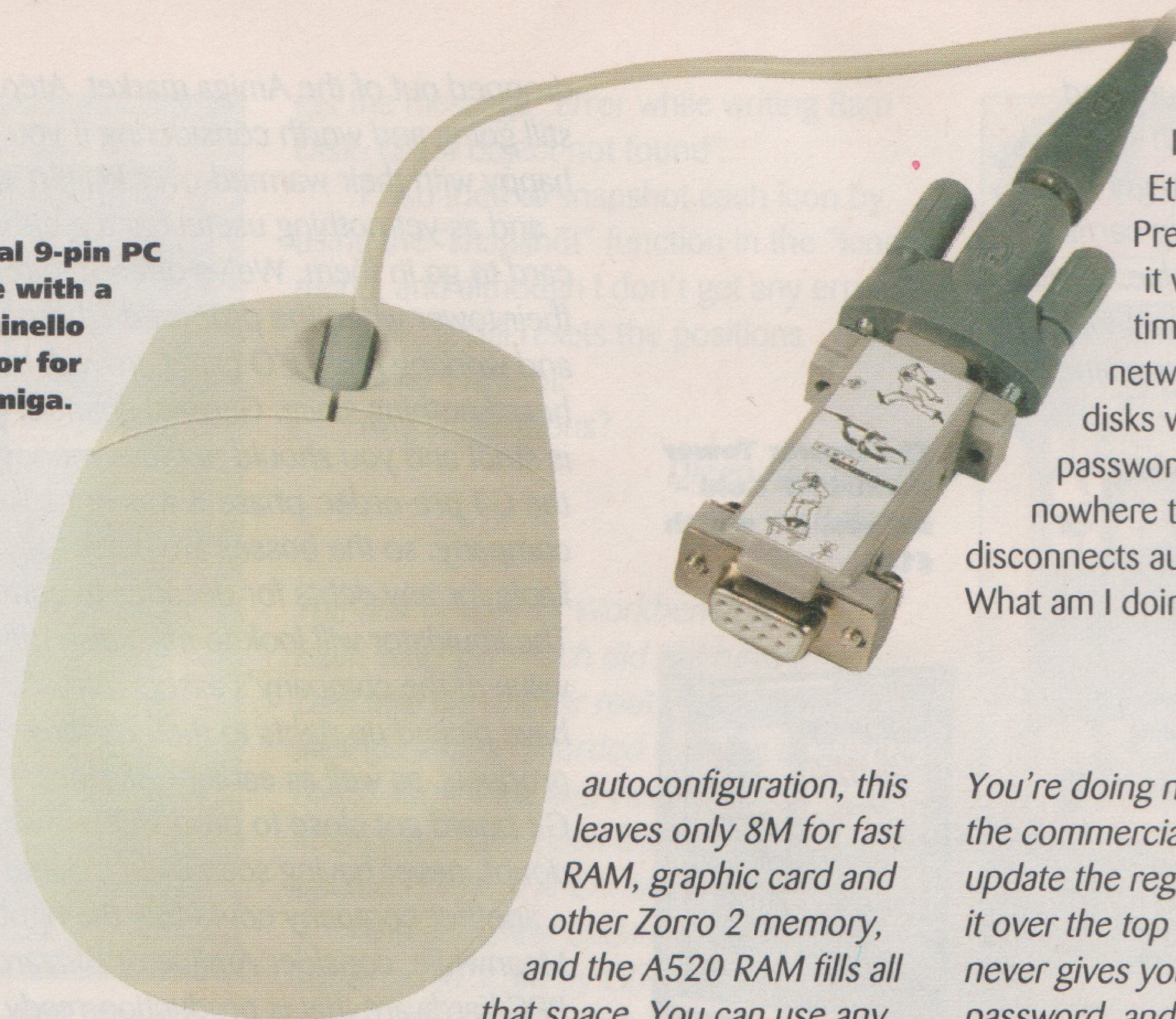
Francisco Miguel Guerrero García
Seville

SerMouse works fine for us, on all Amigas. Perhaps there's something wrong with your adaptor? Buy a cheap 9- to 25-way serial adaptor from a PC vendor – some mice are sold with these – and try again. Try other serial mice to make sure you've not got a weird one, and check your serial port with other devices in case that's the problem.

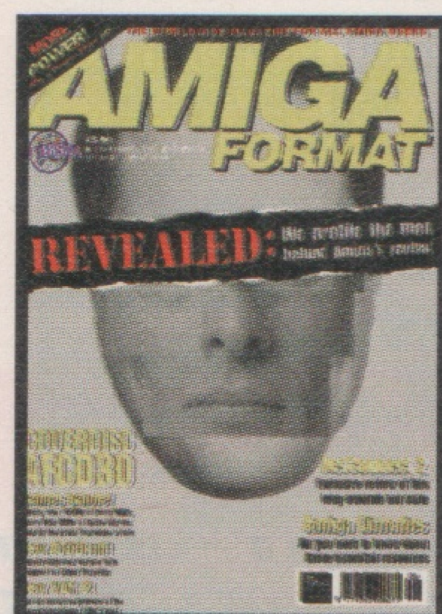
The AlfaPower interface puts RAM in the Zorro 2 area, from address $200000 upwards. The Viper has a 68EC020 processor, like the one in the A1200. This has 24 bit addressing rather than 32 bits on the full '020, '030 and above, so it can only address 16M in total, like the original 68000 in the A500. After allowing for ROM, chip RAM, custom chips and autoconfiguration, this leaves only 8M for fast RAM, graphic card and other Zorro 2 memory, and the A520 RAM fills all that space. You can use any external scan doubler that connects only to the 23 way Amiga video socket. Later models make direct connections to AGA graphics chips, so they're not compatible. ECS users are hardly a big market, these days. You can add Zorro slots to an A500, as I explained in AF a couple of years ago. AlfaData made a three-slot Zorro expansion, the AD-B4500 Bus-convert, with a through-port for your IDE and RAM box; I bought a couple at a Koln Amiga show. This is a bare board; you'll need to encase it, and probably add an extra power supply. The socket has the same 5 pin DIN format as the one on the back of your IDE expansion.

Even then, compatibility is limited. Some Zorro cards require direct memory access, and the A520 does not allow access to its local memory from anywhere but the on-board processor. All Zorro graphics cards need at least a megabyte of space for their display memory, and this competes for the 8M already filled by A520 local RAM. So you can add simple Zorro I/O cards which fit into the 64K autoconfig slots at addresses from $E80000 to $EFFFFF, but cards requiring more space will clash with the A520 RAM.

This rules out Zorro 2 graphics cards, and there's no other option for an A500. You've taken your A500 an impressively long way, but there's not room for much more hardware in its address space.



A serial 9-pin PC mouse with a Punchinello adaptor for the Amiga.



AF114 (Sept 98) – Amiga release capabilities of the new machine and say they've seen the hardware it will be based upon. We had our survey results which seemed to indicate that although nearly a quarter of you were without a CD-ROM drive, nearly half had at least an 030.

GENESIS REVELATION

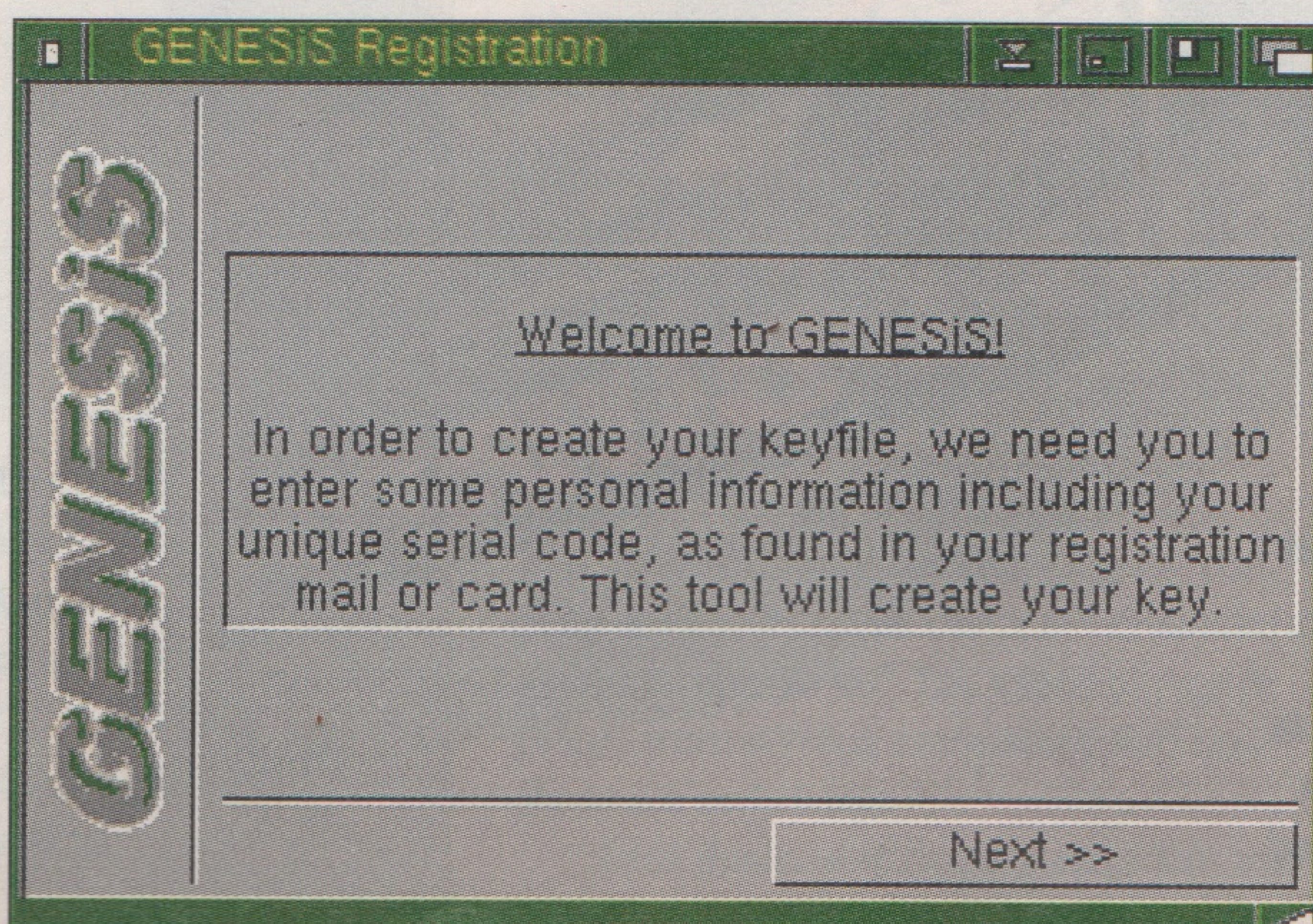
I've bought the full version of Genesis TCP/IP in order to access the Internet and use my X-Surf Ethernet at the same time. Previously I'd tried the demo and it worked, but the 30 minute time-out is too annoying for local networking. Genesis came on two disks with an alphanumeric password, but when I run it there's nowhere to type that in, and it still disconnects automatically every 30 minutes. What am I doing wrong?

Sam Donovan
Stockton

You're doing nothing wrong. It seems that the commercial version of Genesis does not update the registration library when you load it over the top of the demo. So your Amiga never gives you the option to enter your password, and the timeout remains in force.

To cure this, put Genesis install disk 1 into DF0: and unpack the libraries manually. Open a shell, change directory to RAM:, then type DF0:UNTGZ DF0:Libs and press enter. This unpacks the full version libraries to RAM:Libs. Copy them to SYS:Libs. Reboot.

The new version of genesiskey.library is longer – around 13K rather than 10K – and includes code to collect your details and create a personalised keyfile. Will at Eyetech has now tweaked the Genesis installer to make sure that it replaces the demo files when others upgrade.



If Genesis comes up with this, you've got the full version configured right.

TOWER CHOICES

I have an A1200 with 68030 and 32M, and am currently awaiting my pre-ordered G4. I would like to put my A1200 in a tower before it arrives, but I'm not sure which one to buy. I know that the Power Tower got Format Gold but I'm not sure whether it is worth paying £120 for.

What about the new EZ options or the Atéo Tower? Whatever happened to the Infinitiv2? In your articles on IWin there was a picture of an ATX Tower. I've seen this tower for sale; would my A1200 fit inside? How much work would this require? And what is the position with the G4 boards as phase 5 went bankrupt?

Mr Baadshah
London

ATX is a reduced-size PC motherboard format. To get your A1200 into an ATX case, you'd need to punch a new back panel for the Amiga connectors, or run the ones you need out on up to ten DIY flying cables, make a new motherboard DC power cable to replace the PC plugs, recase the Amiga floppy drive and extend its lead, and add an external keyboard adaptor.

That lot will cost far more than a cheap ATX case, and you'll still have to find a way to hold things together – including Zorro slots if you want them.

This explains the difference in price between PC cases and Amiga adaptions. If you like making cables and metal-bashing, the DIY option is cheap, given plenty of skill and time to do the work. The Power and

Continued overleaf ➡

Eyetech cases resolve these issues and others, like front-panel lights and switches, and ease further expansion. You get a lot for the extra money, and nothing earns a Format Gold unless it's good value.

Infinitiv makers MicroniK were loath to send products for review and have since dropped out of the Amiga market. Atéo are still going and worth considering if you're happy with their warmed-over PC ISA slots – and as yet nothing useful bar a graphics card to go in them. We've offered to retest their tower when the promised Ethernet and working multi-I/O cards arrived, but heard nothing since. German financial law is strict and you should not lose money on the G4 pre-order. phase 5 was not a limited company, so the bosses are personally liable for any debts for decades to come. The liquidator will look to maximise the value of the company's assets. Already DCE have picked up rights to their existing PPC products, as well as earlier 68K ones. If the G4 board got close to production – which I doubt, never having seen even a demo unit – another company could buy the rights. Meanwhile, consider AmiJoe or Blizzard PPC hardware that is production-ready.



The Power Tower earned AF Gold – so, yes, it's worth £120.

ADF FILES

I was wondering if there was there any way to use an ADF file from a PC website on my Amiga 4000/040 and how do I alter the files to make them run, especially if they are multi-disk games and they don't like hard drives?

Jeremy Spring
via email

Many of those ADF files are illegal copies, and there are viruses and trojans among them – if you get bitten, that's the price of playing with pirates. However there are legal ADFs, and it's sometimes useful to be able to read or write the format, whether or not you play with emulators.

It's a less efficient format than DMS, but relatively simple and compatible – and there's no shortage of programs to copy ADFs to a real Amiga disk. Aminet has adf2disk, ADF2FMS, adfblitzer, Trackwiz, TransADF, ADFlib and even a PPC-specific ADF library!

An ADF is an uncompressed image of AmigaDOS-format disk tracks, so the code to read and write them is quite trivial – the commented source for UAE's bundled Transdisk is only about 4K long; Trackwiz runs to almost 5K of C.

A command like "transdisk -w hack.adf" writes the ADF-file hack.adf to the floppy in DF0:. Other options to support HD format (rarely used), adjustable track limits, and to access other drives. Trackwiz on Aminet and AFCD52 has a clearer interface. Follow the command with READ or WRITE, then UNIT and the drive number, 0 to 3, and FILE before the name of the disk image to be copied.

That's enough to get the image on or

LIMITED RADIUS

I have an Amiga 1200, 16M RAM, 25Mhz 68040 accelerator, 2x CD-ROM, flicker fixer and Commodore 1936 multiscan monitor. I also have a 20" Sony Trinitron Radius touch screen monitor, which is fixed frequency V=60Hz, H=63.3 kHz.

I can achieve vertical hold but not the horizontal. I am desperately looking for a way of converting 31.25kHz from the flicker fixer to 63.3kHz. I have tried using a few phased locked loop circuits but no joy. Is there a special scan doubler I have to buy to perform this or can a circuit be built on the Amiga side? And does the Amiga support or need a touch screen driver?

N. Smith
Dorchester

You've got a monitor that is made for just one display mode. That mode requires over 60,000 scan lines per second. The Amiga is quite capable of scanning at that or almost any rate, but AGA can't spit out pixels faster than one every 35 nS.

So you could make a custom 63 kHz AGA display mode with MonEd, but you'll get brick-shaped pixels – up to 450 pixels in 1260 lines, minus some all round for flyback. It sounds as if the monitor was made for a mode with three times as many pixels horizontally – probably 1280 by 960 – and you won't get that from any TV-orientated display hardware, however flexible it is.

A Picasso IV graphics card will happily drive that monitor, and can run in a Zorro 2 or Z4 slot in a towered-up Amiga. The recent internal graphics cards for A1200s are also suitable. AGA is not, and the hardware solution is likely to cost more than a tower, slots and graphics card.

The phase locked loop is the least of your problems – you'd need a frame store capable of working at three or four times normal AGA rates, reading the digital Amiga video output, buffering it in a megabyte or more of ultra-fast dual-port memory, and spitting the results out at over 100 million pixels per second.

Commodore's A2024 monitor did exactly that, putting a megapixel display on an ECS Amiga. This expensive luxury used a powerful Texas DSP, fast memory architecture, and still only managed a quarter of the colour depth of AGA. So it's possible, but much cheaper to buy a graphics card or the right monitor.

A scan doubler only stores one line of pixels and repeats it to double the number of scans in each frame. A flicker fixer stores a whole frame, but uses parts mass-produced for TV systems, making the logic relatively cheap – even then it pushes conventional RAM hard, and can't handle input lines at much above 15kHz.

As for the touch-screen feature, this is again designed for one specific setup, and that's not the one you own. Amigas can work well with touch screens, as Index and Eyetech public information systems demonstrate, but you need to pick a suitable screen first, rather than try to coerce whatever you've got kicking around to suit your Amiga.

That Radius monitor was designed for one specific system – it's inflexible even by PC or Mac standards – and is best left with the computer and graphics card it was made for.

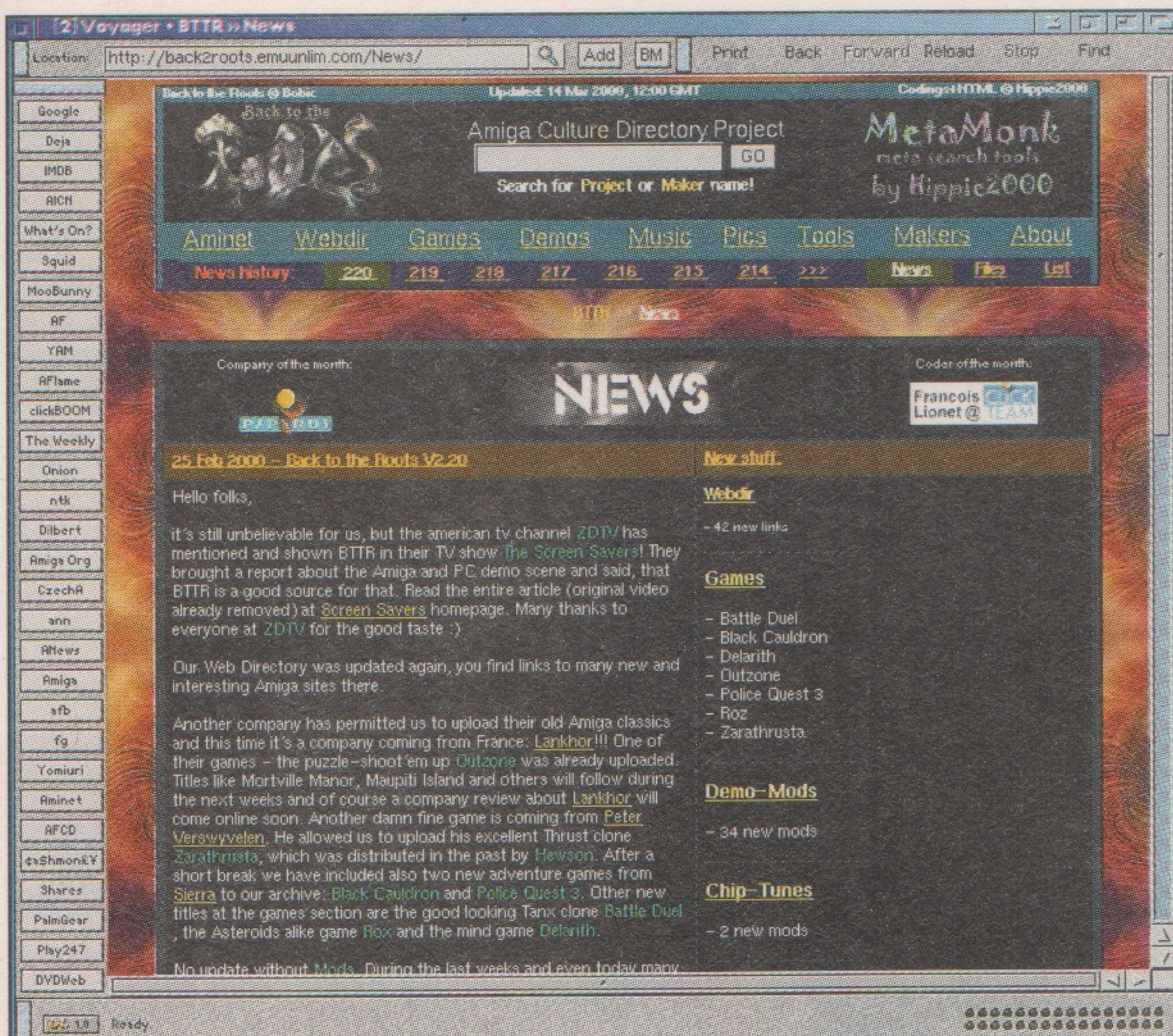
I suggest you flog it to someone with a suitable system – most likely an obsolescent Mac – and use the money to buy something less obscure.

Touch screens are OK for a few moments but agonising in continuous use – if you doubt this, spend a few minutes holding your hand out on your monitor screen, and see what your arm muscles have to say about it.

Touch screens suit embedded systems but they are no substitute for a mouse, pad or trackball.



Not all monitors will work with all Amiga screenmodes.



off a floppy. Making it work is another matter; a lot of old games clash with the AGA chipset, fast processor and copyback cache of your Amiga. I've written thousands of words about compatibility in past AF columns, particularly in my Under The Bonnet series.

Well-programmed, or well-hacked, titles work at once – others require patches, special startups, or a utility like Degrader or TUDE to fool your Amiga into behaving like an A500 that's dozens of times slower. A few demand substantial recoding. It's simplest to buy an old Kickstart 1.3 A500 to run those.

ADFs were designed for UAE, but your '040 is too slow to run the current unoptimised Amiga version of UAE at useful speed. If the ADF file matches the original distribution disk, you might find a program-specific installer on Aminet, in the game/patch directory.

Some of these transfer floppy programs to hard drive and fix them for modern Amigas as they go along.

Most ADF files are illegal copies. Many of them contain viruses and trojans.



AF129 (Nov 99) – The Iwin hoax is started. To this date no-one knows its purpose with the possible exception of the man that started it all – Martin Steinbach. Jim Collas and Bill McEwen, two of the most important people at Amiga, resign and are sacked respectively.

ICON SNAPS

I have an A1200 PPC603e 200Mhz with '060 50Mhz, 32M Fast, CD-ROM and CD-RW, running freshly installed OS3.5 and PFS2. No matter what I do, I can't get the icons on the main Workbench window, set up as a backdrop in the main menu, to remember their position after a reboot.

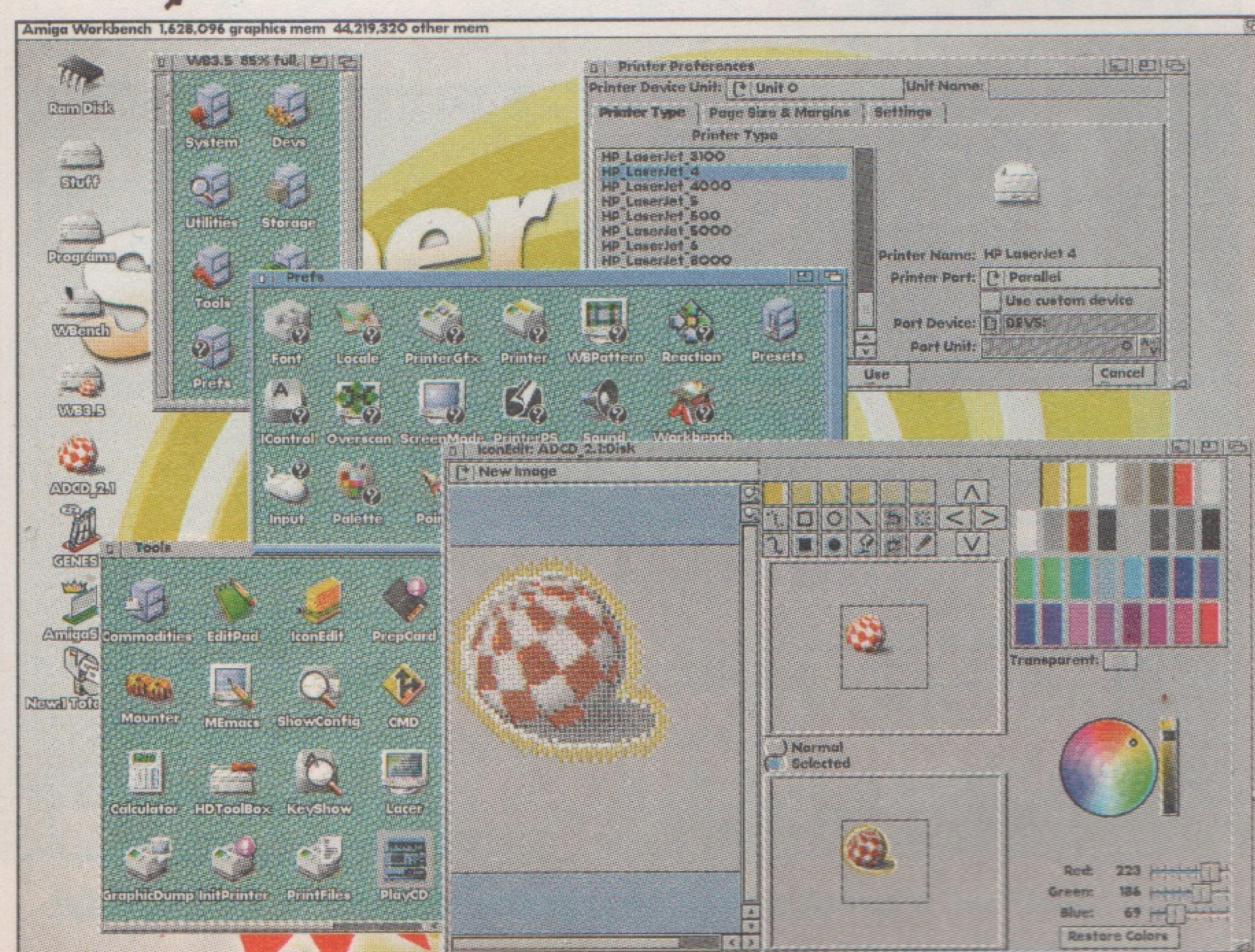
I can arrange them alright, but when I select "snapshot all" in the window menu I get the message "Error while writing Ram Disk: (205) object not found".

I also tried to snapshot each icon by using the "snapshot" function in the "Icons" menu, and although I don't get any error this time, it still resets the positions whenever I reboot.

Any suggestions?

Diego Pappalardo
Belgium

The first version of Workbench 3.5 had a fault that has now been fixed in the BoingBag update that was released at Christmas.



The first release of Workbench 3.5 had a fault: volumes which did not have a Disk.info file in their root could not have their positions recorded with the snapshot menu item. This, and various other infelicities, have been fixed in the BoingBag update released at Christmas.

The complete update (over 11M, squished to 3.5M by LZX) was in AFCD50:-In_the_Mag-/BoingBag_1/archive or downloadable from:

http://www.amiga.de/amigaos35/download/boingbag1.lzx

The RAM disk is harder to snapshot because normally it has a default icon which floats to the first free space on the screen, as an unformatted DF0: icon would. You can still give it your own icon image, with a fixed position, in any version of AmigaOS, by copying a suitable .info file to RAM: as part of your startup sequence. Given a suitable disk icon, such as a picture of a RAM chip, you can copy it to RAM: in user-startup. If that file's in SYS:Prefs, put this line early in user-startup:

```
copy sys:prefs/Ram_disk.info to
ram:disk.info
```

That ensures that your chosen image is used when Workbench opens and displays an icon for RAM: The next trick is to snapshot it – position the icon where you want it, select it, and use the icons/snapshot menu as usual. This updates the disk.info file in RAM, but that will be lost when you turn off the Amiga.

To store the new position, copy the icon back to SYS:

```
copy ram:disk.info TO
sys:prefs/Ram_disk.info
```

The next time you boot your Amiga your chosen RAM icon will appear, just where you wanted it.

LAST MINUTE

I've recently resubscribed to *Amiga Format* after about 12 months break. I was not using my Amiga, because basically I've been too busy.

Now I can get back to my dream machine, I have three questions for you. Why are there not as many advertisements as there used to be? You could compare prices from various companies and now there are only a few.

I am thinking of buying a modem and going on the net. What sort of modem and software should I be looking at, and is my Amiga A1200 Blizzard '030/50 with 10M fast enough? Would an FPU make much difference? And can the Amiga go through any server, or are there specific ones?

P.A. Burgess
Bath



Many firms that used to advertise in Amiga Format now focus on the web.

There are fewer advertisers because you were not the only person to 'take a break' – and you can't expect traders to wait a year or so while you're busy.

A lot of the firms that used to advertise in AF are focused on the web now. It's easy to put your Amiga on the net, and all you need is an external modem – anything from 28800 to 56K baud will serve you well, and the model hardly matters.

A faster serial port such as Twister or SilverSurfer might saves you some time on-line, depending on what you're doing.

The motherboard port will work, but buffered ones can download text more quickly, especially if you're using a SuperHires, Multiscan or Dbl display. The FPU will make no appreciable difference to Internet access.

All the software you need is on AFCDs, although you'll still need the full Miami or Genesis (or NetConnect bundle) to stay online for hours. The demos disconnect after half an hour, requiring you to make a fresh call.

A quick scan through the Workbench email postbag reveals that Amiga-compatible ISPs include demon, enterprise.net, free-online, free4all, freeserve, flyer, libero, ournet, the-top, ukonline, wire.net.uk and woden. There are hundreds more.

You can use any server that offers a full internet service, preferably via a local phone call, though support and convenience varies. The main exceptions are AOL and Compuserve, who have proprietary networks that only connect you indirectly to the internet, via their central computers. These require custom software which is only available for PCs and Macs, and generally obstructs internet compatibility in any case.

Simon Goodwin

Amiga.net

Shopping online isn't just more convenient than traipsing down to the nearest shopping precinct – it's also a lot cheaper

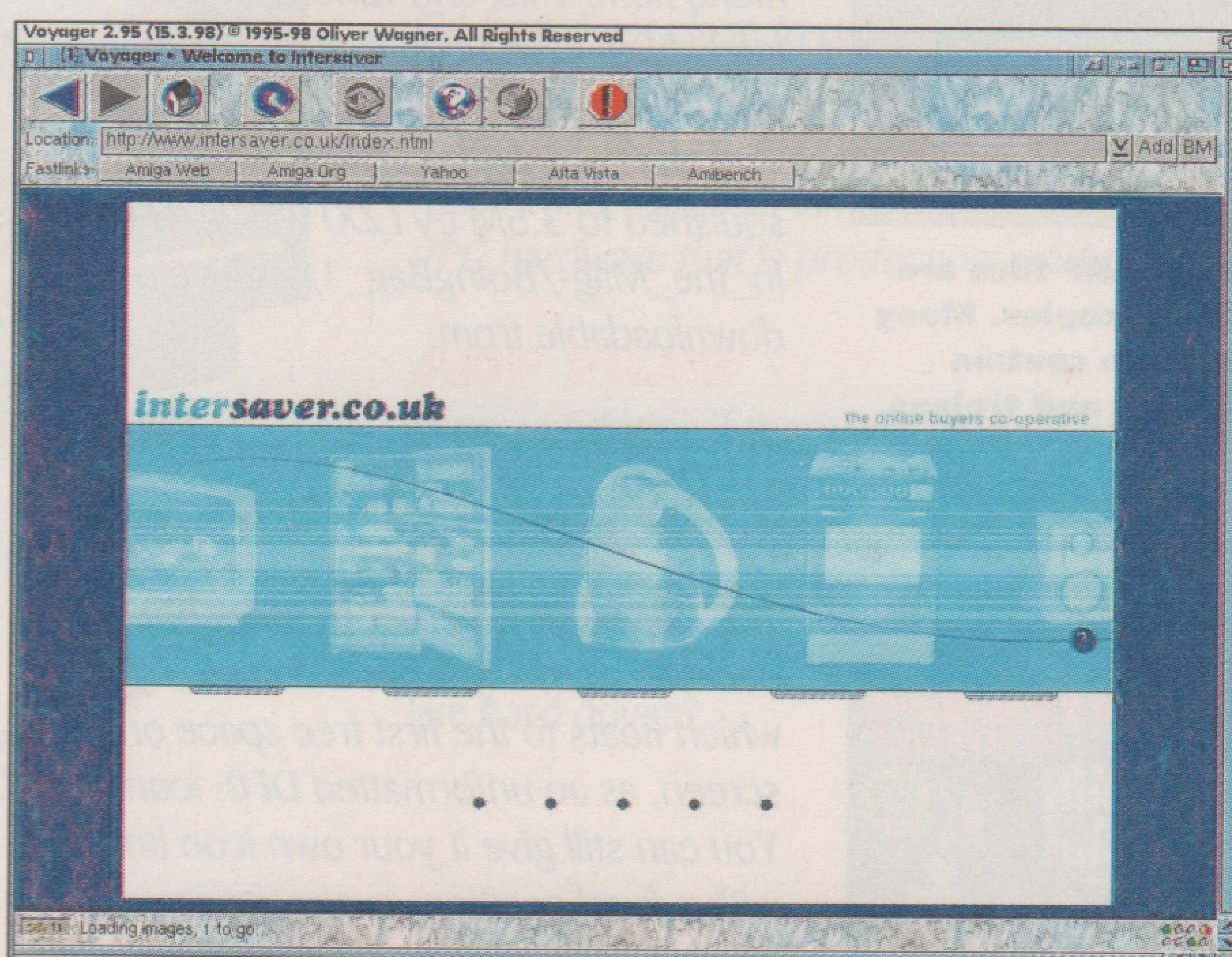
For years, television and the newspapers have been portraying the Internet as a hellish netherworld populated by fraudsters and criminals. And this relentless drip-drip of anti-Net propaganda has had an effect in some quarters; even as I write this, the government is racing through Parliament the Regulation of Investigatory Powers bill. This combines much needed measures to bolster the electronic economy with a range of totally unnecessary Big Brother-esque surveillance powers for the law enforcement agencies. It justifies these on the grounds that the Net is used by (amongst millions of other people) child pornographers.

SCARE STORIES

Particularly in the light of such ludicrous over-reaction, there's nothing quite so satisfying as seeing the Great British public stick two metaphorical fingers up at the massed ranks of the British media, collectively telling them where to put their apocryphal scare stories about all these mysterious online scoundrels.

Mercifully, despite the best efforts of the ill-informed mass media to convince us that entering your credit card details into a website is about as sensible as inviting Hannibal Lecter around for dinner, e-commerce has finally started to take off in a big way in the UK.

The fact remains that if you're transferring your credit card details via an SSL (secure sockets layer) connection, then it's actually far safer than buying something over the telephone, or handing over your card to a shop assistant who then promptly disappears into the back room to be alone with it for five minutes.



Intersaver says it passes the savings it gets from buying in bulk on to its customers.

AF130 (Dec 99) – Amiga cancel the MCC project.

Personally, these days I avoid high street shopping as much as possible, making a high proportion of my purchases online instead. Buying on the Web isn't just safer than buying in a shop, it's also much more convenient, not to mention much cheaper. Why drive around a town centre car park for half an hour on a Saturday afternoon in search of a parking space, and then force your way through heavily congested high street shops, only to be served by an assistant who's considerably less knowledgeable than you are about the item you'd like to purchase, and then be charged a premium price for the privilege?

It just doesn't make sense.

The Internet has long been a great place to make small purchases, such as books, CDs and videos. Who in their right mind would pay £15.99 for an album at HMV or Our Price when it could be ordered for £9.99 at Amazon, Audiostreet or any one of the countless other online music retailers? And as far as videos and DVDs are concerned, you need look no further than BlackStar.

The global nature of the Internet also makes it easy to send gifts to loved ones on the other side of the planet. If you were to buy a book and post it halfway across the planet, you'd probably pay a tenner or more in postage, but if you ordered it directly from an online retailer in the recipient's country you'd save yourself most of this cost. Interflora has long used a similar system to deliver flowers, networking florists in countries around the world, but if you want to send flowers to a friend or relative in the States, for instance, you may find it's cheaper still to locate an online florist based near to them and simply order the blooms yourself.

CONTACT POINT

You can contact me with your comments, questions and suggestions at dave@cusick.co.uk or through my website at http://www.cusick.co.uk.

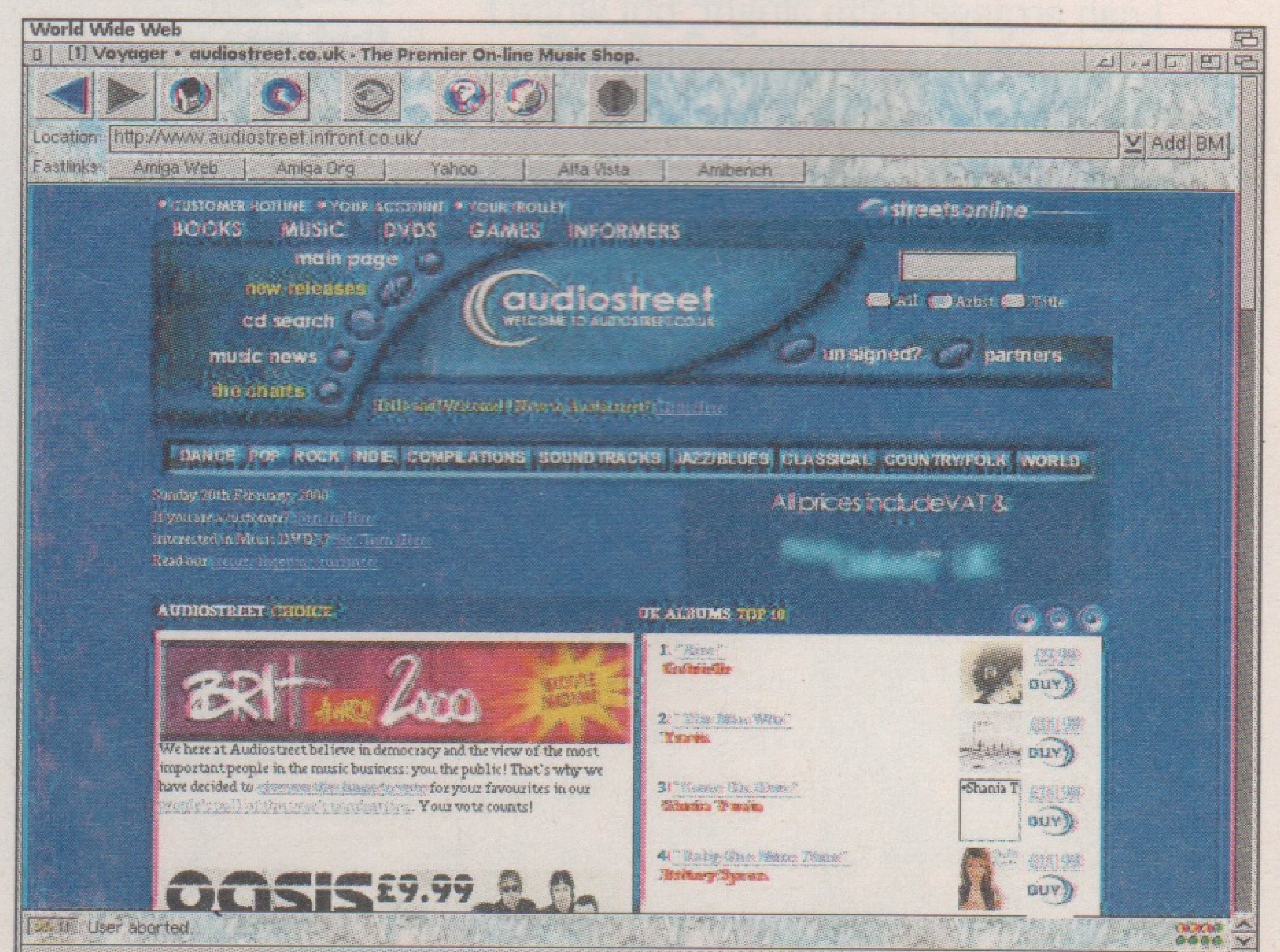
SUBSTANTIAL SAVINGS

You don't just have to think small though; if you've never thought about buying domestic appliances and entertainment systems online, then perhaps you should start thinking about it – you could save yourself a substantial amount of money. For instance, there's a good chance that the same widescreen TV which costs £600 in Dixons will be available for around £500 online at Hutchison's. The same sorts of savings can be made on fridges, freezers, washing machines and so on.

It's not just goods that you can get online cheaply and easily either. After an affordable holiday? Visit Lastminute.com. Want to lay your hands on some concert or



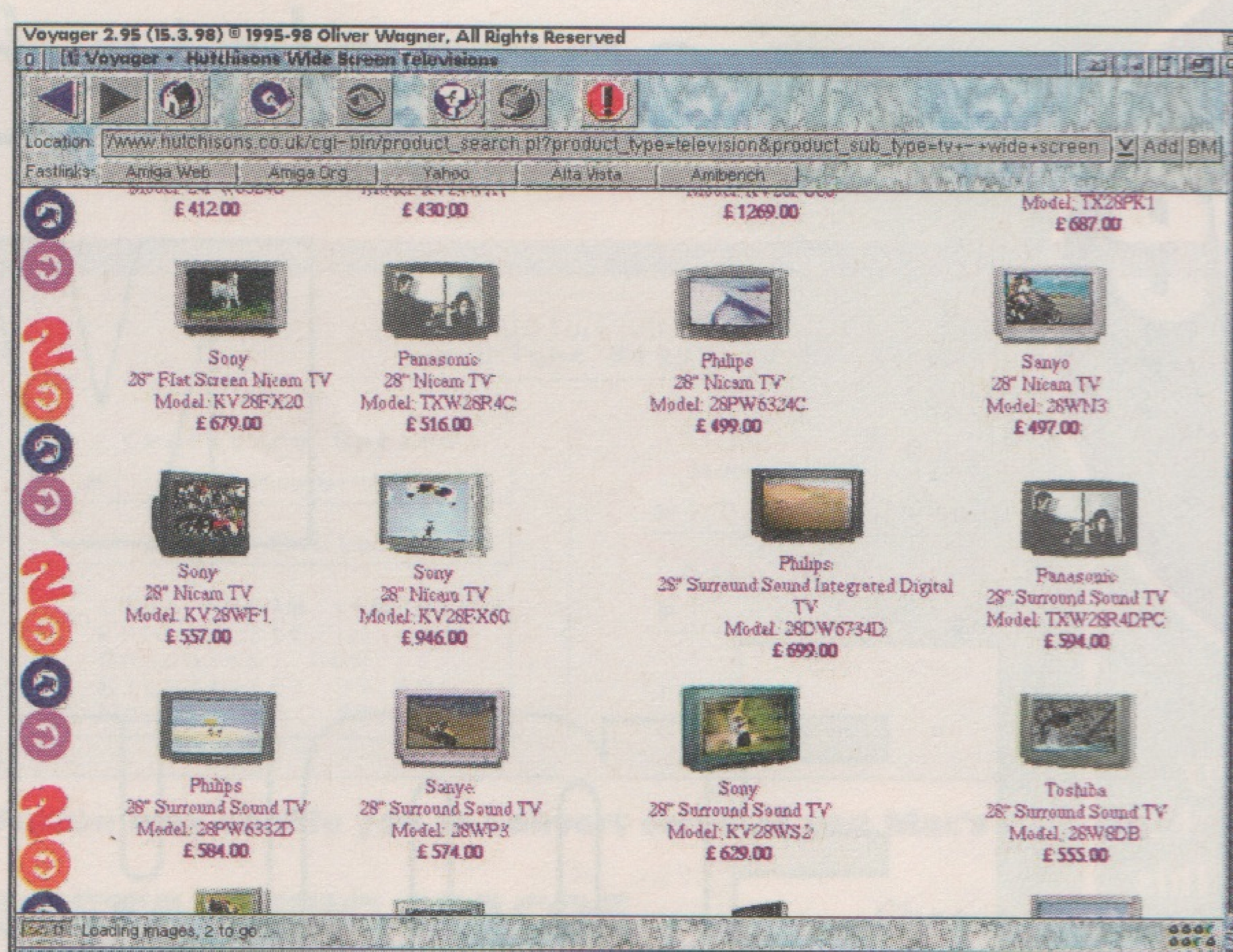
Aloud isn't all that cheap, but it beats hammering the redial button on your phone for hours on end in a futile attempt to get through to a concert ticket hotline.



Audiostreet has a great selection of CDs, and it can be slightly cheaper than Amazon.



For the most competitive prices on videos and DVDs, BlackStar should be your first port of call.



Thinking about buying a big electrical item? Buy it online, it'll probably be cheaper.

theatre tickets without having to spend hours on the phone on the morning they become available? Try Aloud, Ticketmaster or What's On Stage.

INSURANCE ONLINE

As you're doubtless aware, having seen the advertisements on television, some companies are now even offering you the chance to buy your insurance online. In fact, I recently switched my car insurance to one company who were offering a 10% premium reduction on all policies purchased online.

There are two things to be aware of here. Firstly, you obviously need to make sure that you don't take out a policy that doesn't cover everything you need it to, so make sure that the company lets you read the broad terms of the contract before you agree to anything. Secondly, be aware that some companies employ an online purchasing process that makes use of Java. If this is the case you'll need to hop onto the Internet from another machine to complete the transaction. There are a number of reasons why online sites are able to offer such vast savings on high street prices. The most obvious is that setting up shop online doesn't involve the overheads attached to renting or buying premises, paying retail staff and so on.

> Setting up shop online doesn't involve the overheads attached to renting or buying premises and paying retail staff

It's also the case that a few of the big online sellers – the most obvious example being Amazon – have created such a buzz that their financial backers have poured millions and millions into developing them without paying too much attention to the profits they actually generate. Amazon has yet to generate any profit whatsoever, but it's not about to stop offering competitive prices on books, CDs and so on. If a company set up high street branches and proceeded to run up expenses that outweighed takings, let alone profits, for several years on the bounce, its creditors would have it closed down in no time. On the Net, however, running up huge debts is par for the course. QXL lost £38m in the last quarter of 1999, but it's being proclaimed a success story because its user base continues to grow. It's a crazy state of affairs, but while it lasts, we might as well all make the most of it.

Another reason why it's usually cheaper to buy goods online is that the growth in e-commerce has given birth to the online equivalents of the cooperative shops which appeared back in the industrial revolution. A typical example is Intersaver, which describes itself as "the online buyers cooperative". The idea here is that by providing a conduit through which large numbers of people can buy particular items, a bulk order of the goods can be sourced directly from the manufacturer and the saving this results in can be passed on to shoppers. Intersaver currently offers a sound and vision shop. A domestic appliances shop, as well as home and garden, sports and leisure, and kids' shops are all promised for the near future.

Nowadays, no matter what it is you're after, the chances are there's a site selling it at a much better price than you'll be able to find in your nearest town centre or out-of-town shopping hellhole. Just take a look at any decent shopping directory site (I'd recommend Rich Clickings) and have your credit card ready.

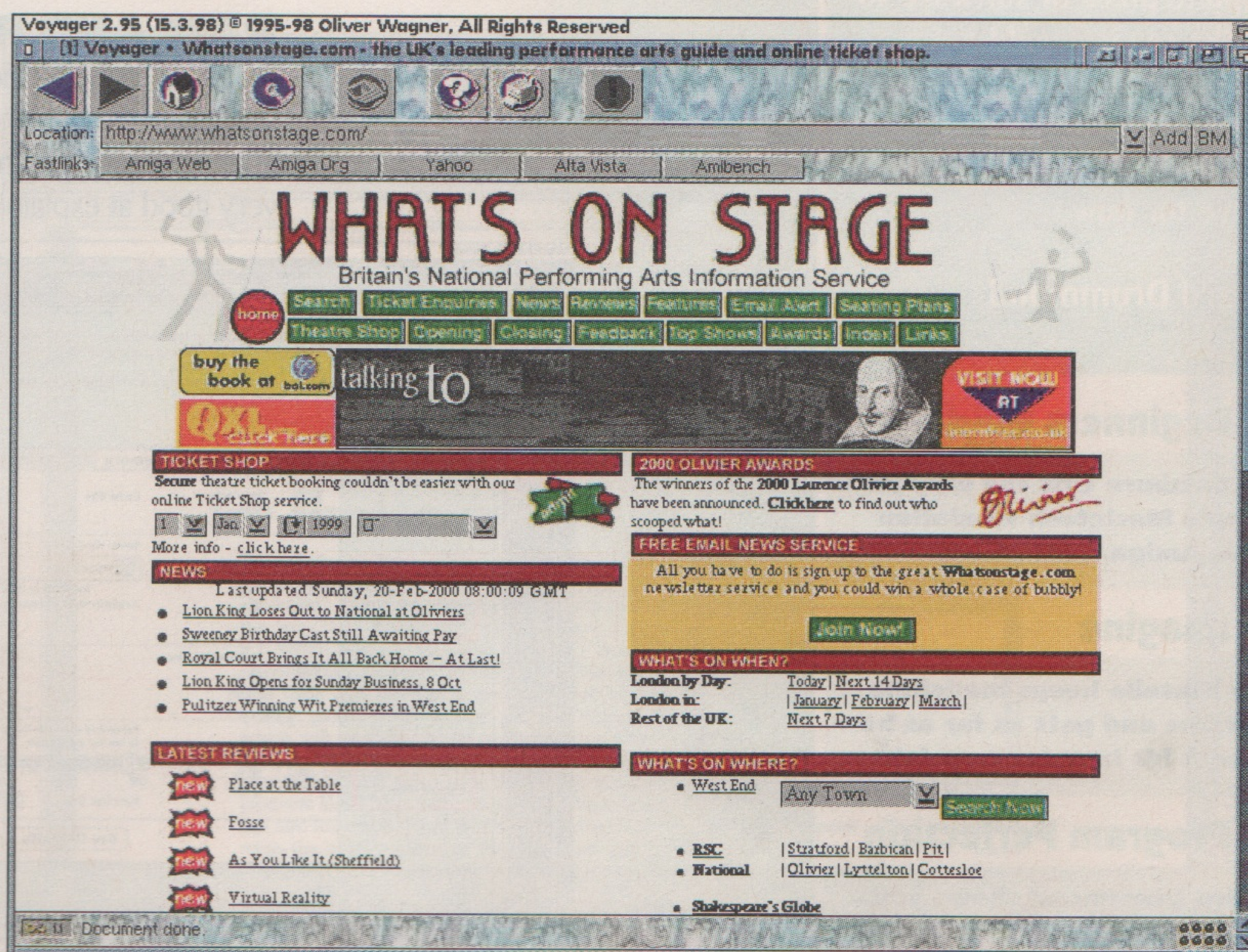
Dave Cusick



Gifts such as flowers have been popular online purchases for some time now.

WEBSITES OF INTEREST

Aloud: www.aloud.com
Amazon: www.amazon.co.uk
Audiostreet: www.audiostreet.co.uk
BlackStar: www.blackstar.co.uk
Hutchison's Direct: www.hutchisons.co.uk
Interflora: www.interflora.co.uk
Intersaver: www.intersaver.co.uk
Lastminute.com: www.lastminute.com
QXL: www.qxl.com
Regulation of Investigatory Powers bill: www.homeoffice.gov.uk/oicd/ripbill.htm
Rich Clickings: www.richclickings.co.uk
Ticketmaster: www.ticketmaster.co.uk
What's On Stage: www.whatsonstage.com



You can book tickets for stage shows online too, at sites like What's On Stage.

Creative

So, here we have it: my final introduction to the *AF* Creative section. This section is looking a bit thinner than usual, but this is because there didn't seem to be much point in running the two new tutorial series that we were planning. Oh, well – the space has been put to good use elsewhere in the magazine.

Our Beginner's Guide this time is written by a new face, Nick Lamburn, and is an introduction to Mac emulation on the Amiga. Two issues ago we gave you the full version of *Fusion* on the coverdisc, and, while this a great package, it takes some experimentation to get the best from it. So, to save all that hair-pulling and nail-biting, we though it was about time we gave the subject the full *Amiga Format* Beginner's Guide treatment.

Alas, our two remaining tutorial series will never now be completed. From my point of view, this is actually something of a relief: my programming tutorial has been a nightmare to write due to never having enough time to work on it. The idea originally was to build a complete piece of software so that the reader could get a glimpse of the large view of building software. But it never really worked that way.

Bye for now...

Richard Drummond 

CREATIVE INDEX

The complete beginner's guide to...

Mac Emulation

Want Apple Mac software but don't want a Mac? Here's the solution...

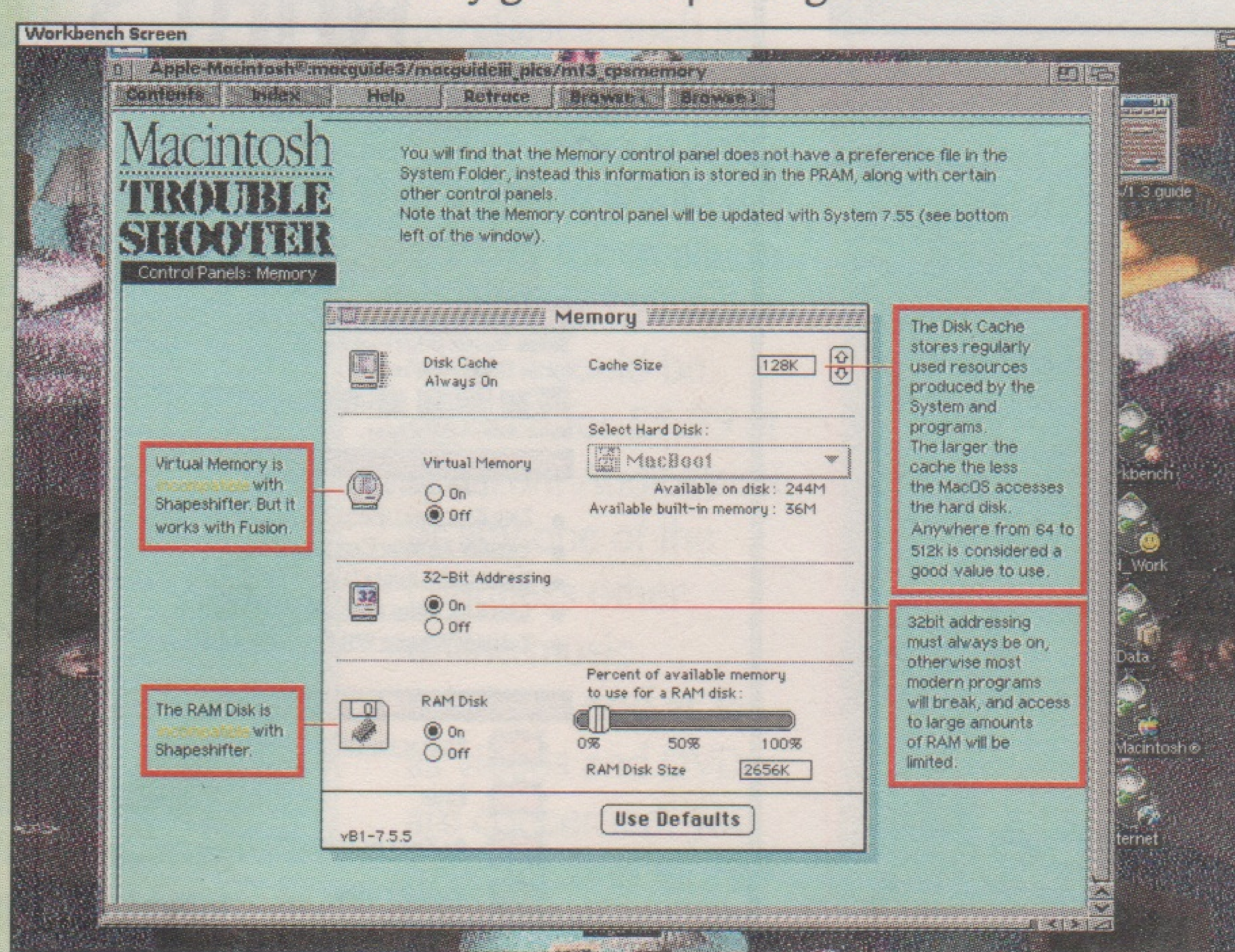
You own an Amiga, arguably the most competent computer on the planet, yet all the desirable applications simply do not want to know. You have two options: Macintosh or PC emulation. The latter is really only for those with really top-notch machines but Mac emulation can be just the ticket for Amigas of all kinds.

> **There are two areas which will cause you a lot of grief if set up improperly. Avoid these by reading carefully**

It sounds great in theory, because applications like *Excel, Photoshop, PowerPoint, QuarkExpress, Word* and others are industry standards in their categories. Of course, they exist on the Mac and since any Amiga can re-create a full performing Mac, why not go for it? Unfortunately, it's never quite as simple as that – but this guide is intended to get you going with the minimum of fuss.

RAM AND ROM

I will skip many of the issues related to actually setting up the emulators, since the guides provided with each are themselves very good at explaining the issues involved.



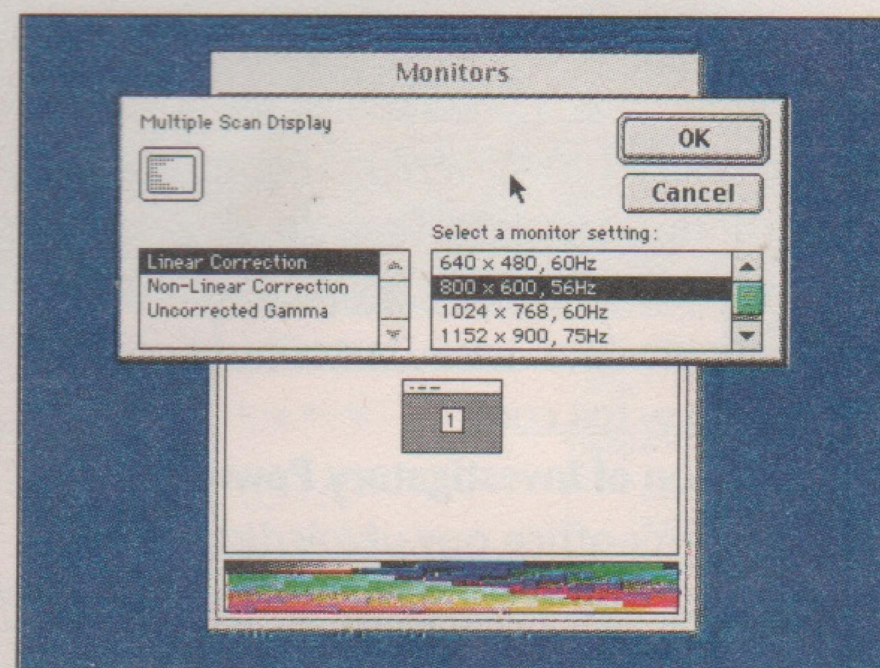
Check out our troubleshooting boxout on the following page.

> 
>
> ## TOP TIP
> ### KILO
> ***ShapeShifter*** **asks you for the measurements in Kilobytes, rather than the more friendly Megabytes you will be dealing with. So how do you convert megabytes to kilobytes? Simple – times your number of megabytes by 1024. For example: 8M x 1024 = 8192K.**

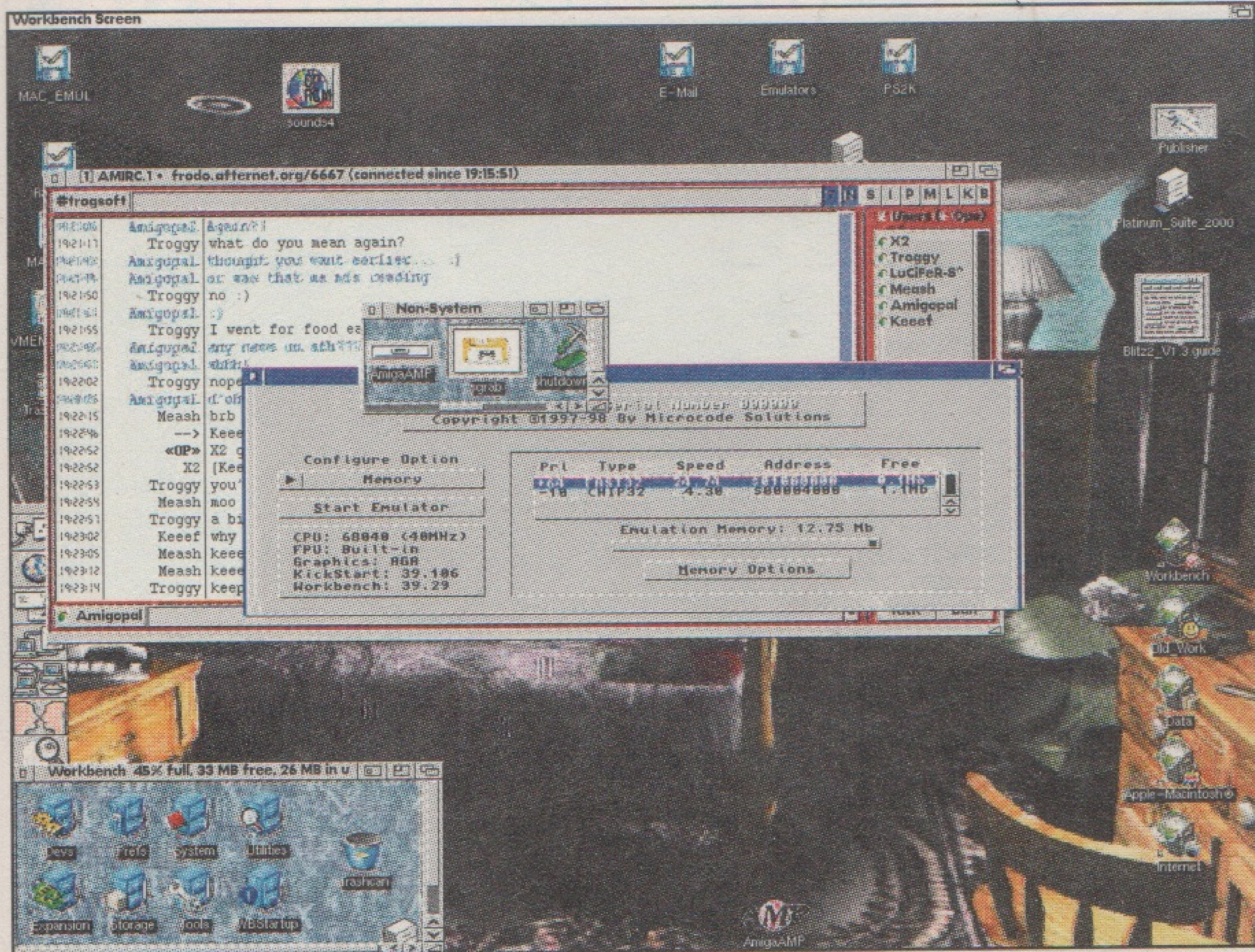
However there are two areas which will cause you a lot of grief if set up improperly. Avoid these problems by reading carefully.

Firstly, you need a legal copy of the ROM from a 68K based Mac. A 68K based Mac is simply one not labelled as a PowerMac. These include the MacII series, Quadra Series and LC series. They are all suitable for Mac emulation. Be warned, however, that early MacIIs (the MacII, IIi and IIx) only have a 256K ROM and that only *Fusion* will work with these. Note also that, legally, you need to own the Mac from which you grabbed a copy of the ROM.

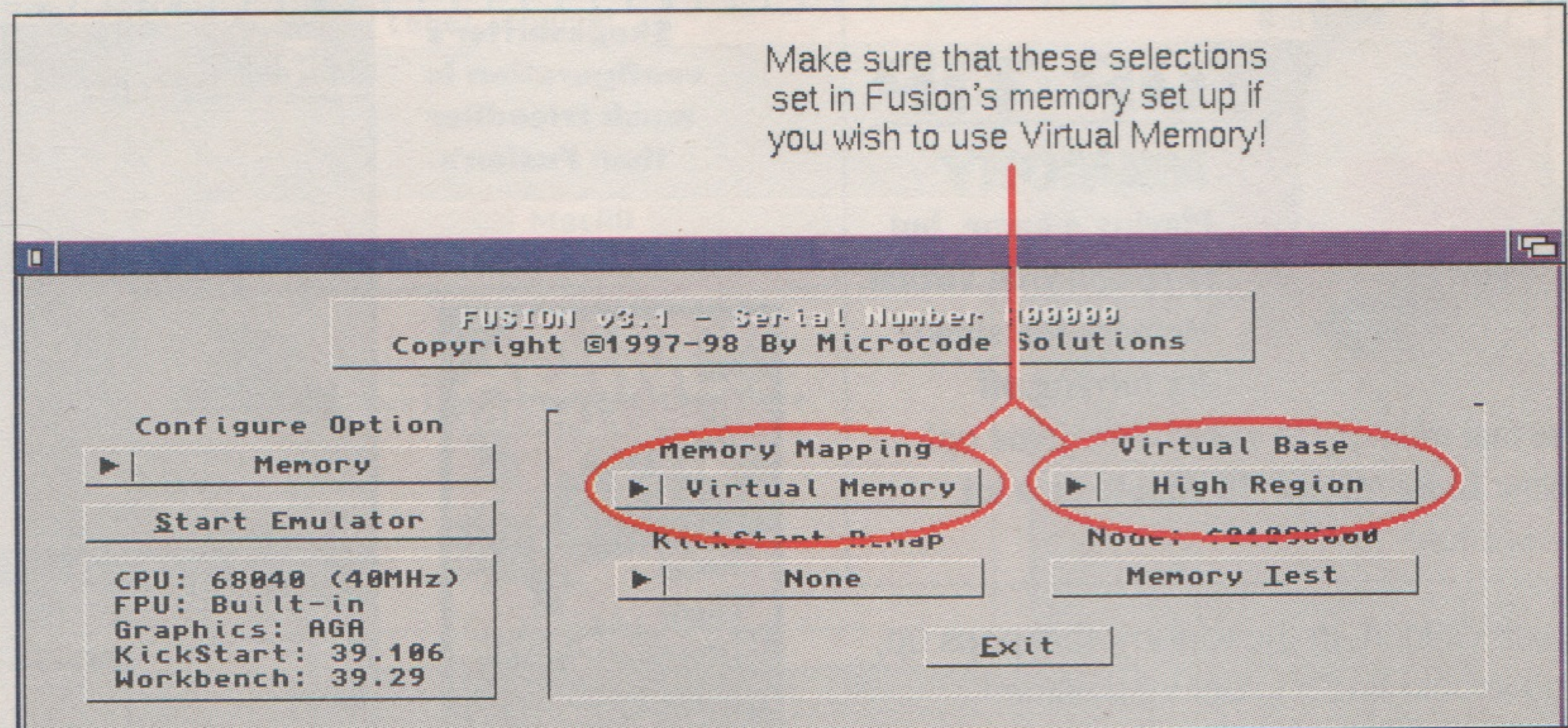
So what's the ROM? It's very similar to the Amiga's Kickstart chips; physically, it's a chip inside a real Mac. However, modern Mac emulators only need a copy of these chips in a file stored on your Amiga's hard disk; the chips do not need to be connected to your Amiga. To grab a copy of these ROMs, follow the instructions provided with *Fusion* or *ShapeShifter*.



Macintosh screenmodes expect square pixels – unlike most AGA modes.



Memory for the Mac emulation must be in one contiguous chunk.



Fusion may enable you to convert some of you Mac's hard disk space into memory.

> ## TOP TIP
> ### FILEDISKS
> **FileDisks not fast enough? Why not add buffers to the partition the filedisk is on. For example, if it's on the HD1: partition, in a Shell, type: ADDBUFFERS HD1: 1000. That should speed you up!**

Once you have a copy of the Mac's ROM for *Fusion*, place it in the ROM_Images folder, or if you use *ShapeShifter*, rename it ShapeShifter ROM and copy it to *ShapeShifter*'s folder. Next, double-click on your emulator's icon and refer to your emulator's documentation to configure your virtual Mac.

MEMORY ISSUES

Macs are far more memory hungry than Amigas. At the very least, you should be able to allocate 4M of memory for the Mac. Note that the portion you set aside for your virtual Mac will be completely inaccessible to your Amiga while the Mac emulation is running. Realistically, you will want to be able to set aside 8M of memory at least. See your emulator's documentation on how this should be done.

If your Amiga has a full 68030, 68040 or 68060 processor (you can check this by running ShowConfig in your Workbench partition's Tools folder) and you are using *Fusion*, you can convert a certain amount of the space from your Mac's hard disk into memory. Though this makes the virtual Mac slightly slower, it means that you will be able to run *Microsoft Word 6* on a 4M Mac.

> ## TOP TIP
> ### SPEED
> **Filedisks still to slow? Why not allocate a whole partition? You won't regret allocating 400M of your precious hard disk space either since Mac software will use it! And since hard disks are so cheap, why not go out and buy your a virtual a whole hard disk?**



AF52 (Nov 93) – One of the worst "reviews" in AF's history. We spent ten pages saying how amazing the Video Toaster was (and it assuredly is) without ever actually managing to get it to work.



AF56 (Feb 94) – Commodore put a cheeky ad up outside Sega headquarters in London parodying their advertising slogan. The ad hoarding has a picture of a CD32 on the right and the wording: "To be this good will take Sega ages".

INSTALLING MACOS

We are going to install the MacOS the easy way. You have two options. The first of these is to install from a set of disks which have the MacOS on them. To do this, you will need to boot from the MacOS disks or CD. This will require that you have either a high density disk drive or have the CD drive in your Amiga set up to work with the Mac. A high density disk drive will allow you to access the disks which practically all recent Mac software provided on disk, (though mostly everything is on CDs now) – this includes the MacOS, up to release 7.6.

Firstly, make sure that you boot from the first Install disk. When asked if you wish to format the "Mac's" hard disk, confirm the action and give the hard drive a name. When the formatting of the hard disk is completed, start the installer contained within the first Install disk.

The second option is even easier and allows you to install MacOS with a few clicks of a mouse. The disadvantage, however, is that you are limited to slightly older – but still useful – versions of MacOS. The advantage is that because they are free, you can use these versions of MacOS on any Mac emulation set up without having to purchase MacOS.

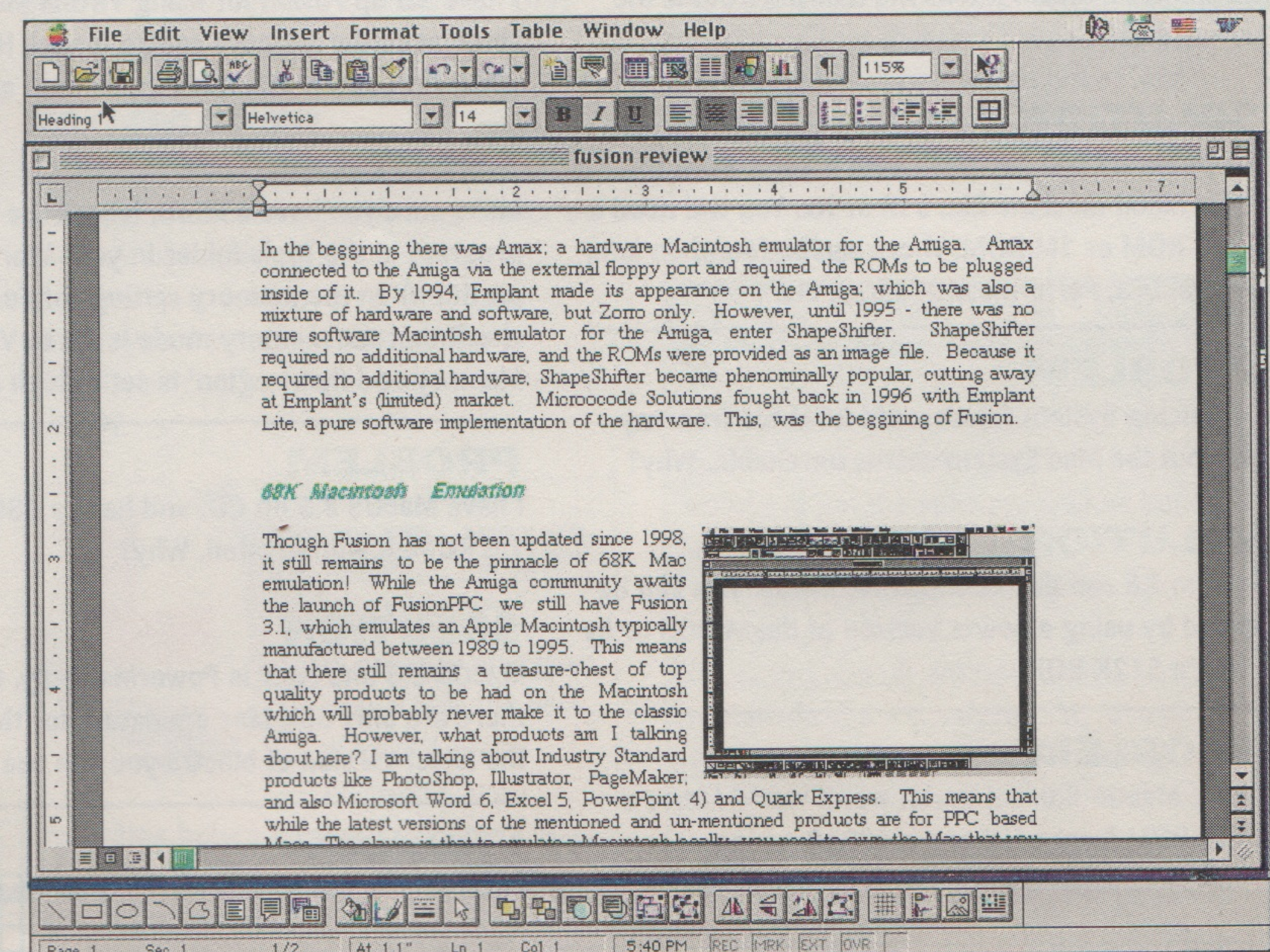
The System 7.5 FileDisk was provided on last month's *AFCD* but you can find the System 7.0 FileDisk I have prepared for you on this month's *AFCD*.

Choose which you want, then drag either the 7.0 or 7.5 file disk from the CD to *ShapeShifter*'s folder or *Fusion*'s HardFile folder. Place this file disk as being the first and then specify your virtual Mac's partition or the FileDisk you have prepared. In *ShapeShifter*, make sure that you specify the MacOS filedisk as number one and that the cycle gadget at the bottom of the Drives window reads "FileDisk 1".

> ## TOP TIP
> ### MEMORY
> **Is the Mac emulation a little unreliable? Try to leave the Amiga around at least 1M of RAM to breathe in – don't allocate your virtual Mac all of your memory, remember your Amiga needs to breathe as well!**

Likewise with *Fusion*, make sure that the FileDisk is at the top of the listview. When MacOS has almost finish booting, you will be asked if you wish to format the Mac's hard disk. Confirm once again and give the hard disk an appropriate name. When the hard disk has been formatted and its icon has popped up onto the desktop, double-click on the MacOS

Continued overleaf ➡



Many Mac applications are cramped – unless you have a graphics card.



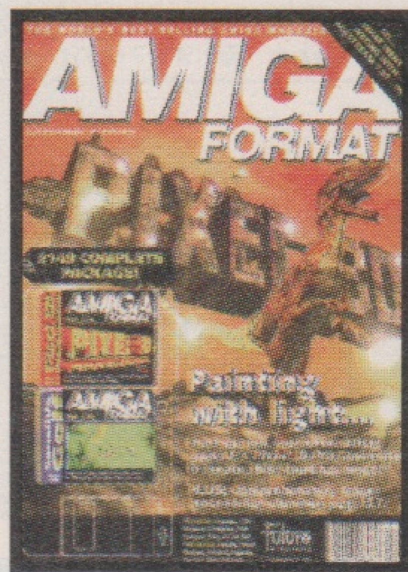
TOP TIP

MEMORY

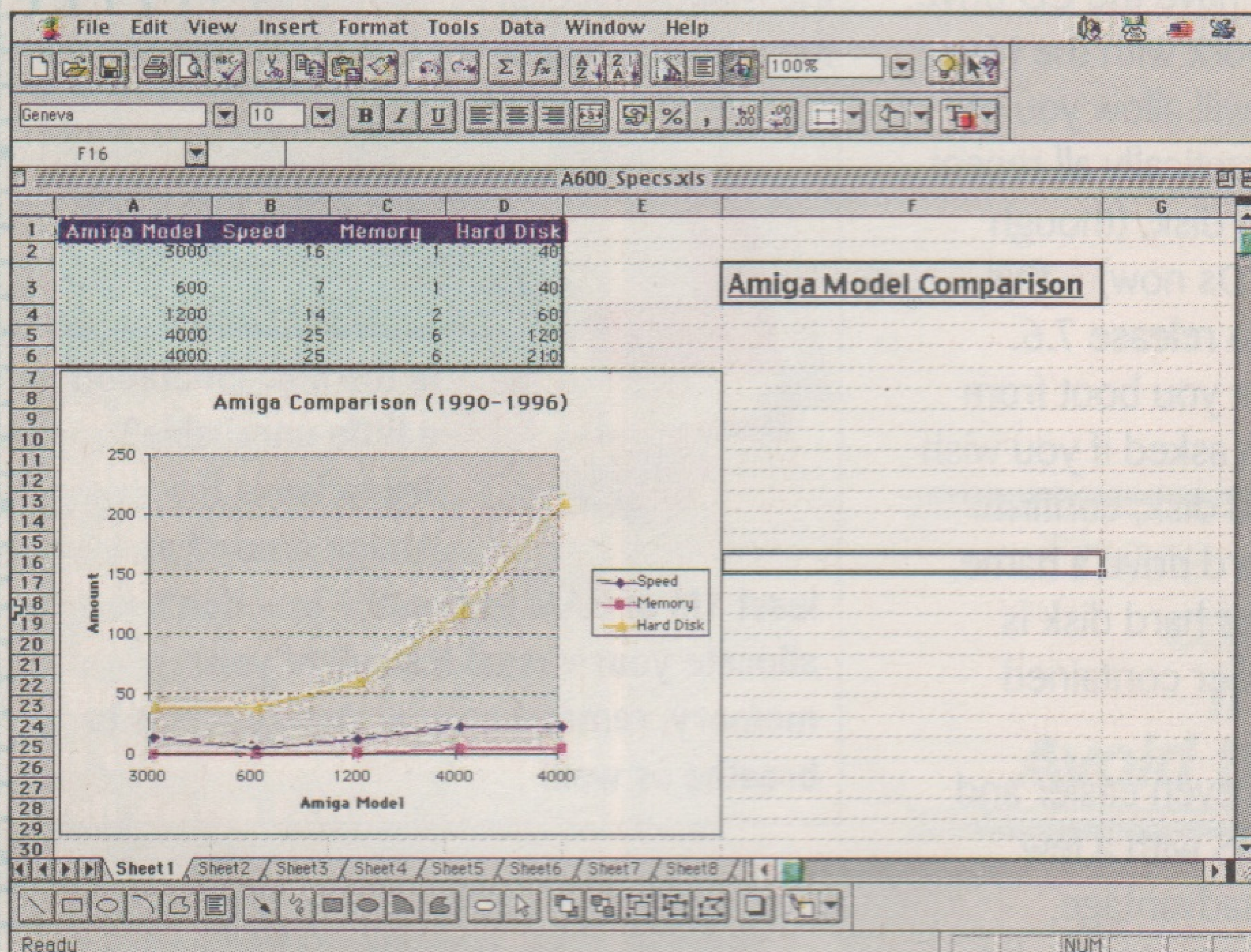
Playing a game, but is *Fusion* with Virtual Memory too slow? Try turning off virtual memory to speed that game up! Now *Duke Nukem 3D* should be a lot more fun!

filedisk's icon. In the window that pops up, you should find a folder icon named System Folder. Click with the left mouse button, hold down and drag this icon over your fresh hard disk's icon – it should change colour to indicate that you are positioned over the icon and ready to copy. A progress bar will appear to tell you how much it has done so far.

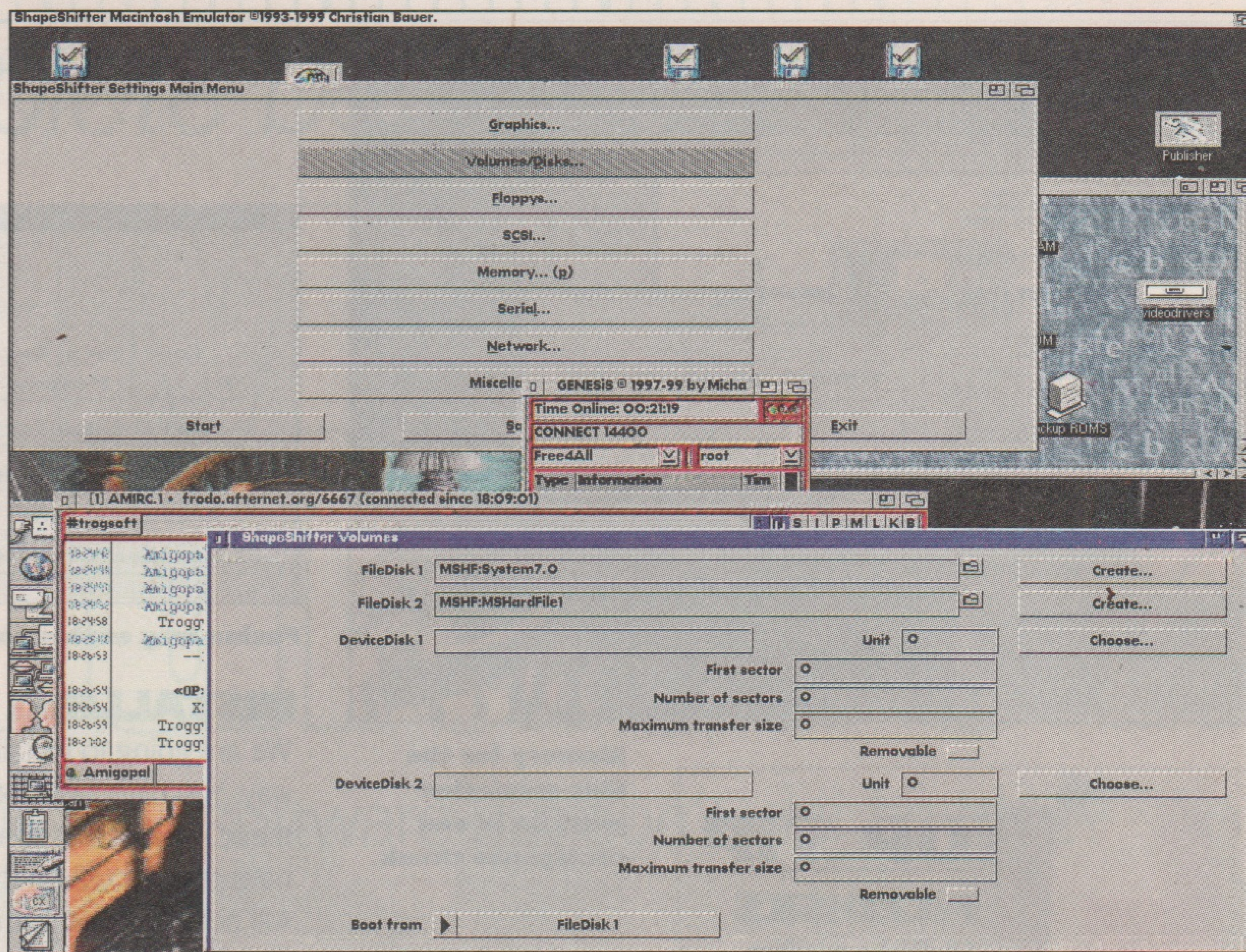
When it has finished, using the Special menu, select Shut Down. To check that all has gone well, remove the MacOS filedisk's entry from *Fusion* or *ShapeShifter* leaving just the filedisk or your partition's entry. Fire up the emulation, and your virtual Mac's hard disk will boot just like the other MacOS file disk. You have now successfully installed MacOS, the easy way. For now, play around with the Control Panels found in the 'System Folder' and customise the way your Mac looks to your liking.



AF65 (Nov 94) – AF finally gets an email address!



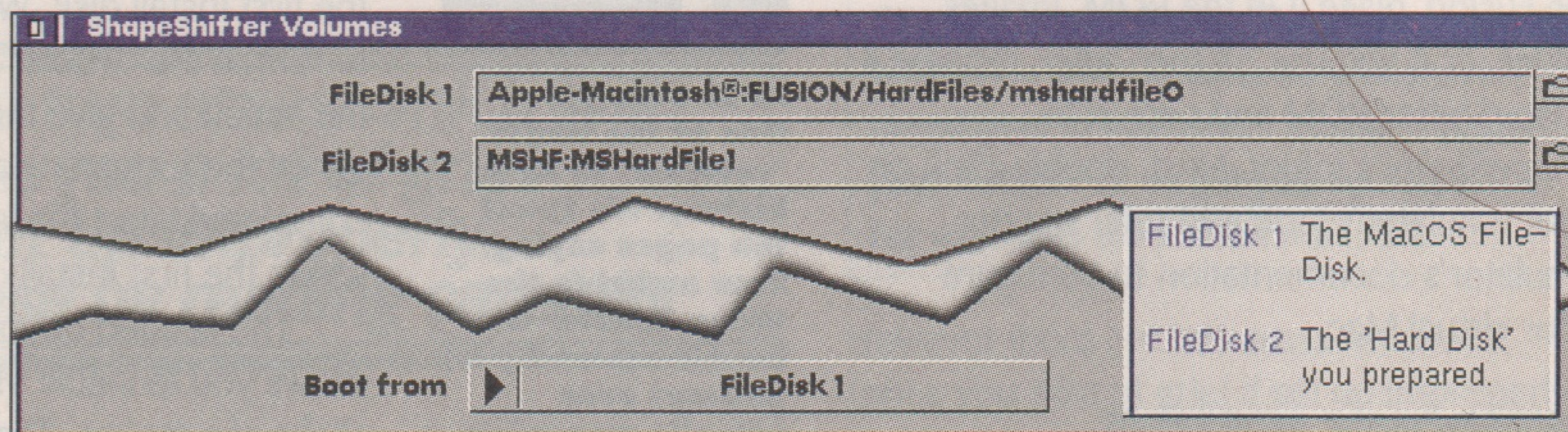
If you need Microsoft Excel on your Amiga, this is the way to do it.



Shapeshifter's configuration is much friendlier than Fusion's.

SOFTWARE AND APPS

So now you have your Mac up and running, what software can you run, what software is recommended or even more importantly, where can this software be obtained? If you



FileDisks are more convenient but a lot slower than dedicated partitions.

TROUBLESHOOTING

Here are some of the most common problems with Mac emulation and how they can be solved. Be sure to check the *AFCD* for more Troubleshooting info!

PROBLEM

I am using *ShapeShifter* and I grabbed a copy of the ROM from a MacII. It tells me that the ROM is the wrong size!

SOLUTION

***ShapeShifter* will not work with a 256K ROM from a older MacII machine like a IIi or IIx. You will need a 512K ROM or 1M ROM. These can be found on later MacIIs, LCs, Performas, Quadras, etc.**

PROBLEM

I am using System 7.0 on a 1M ROM file from my Mac but the Mac System seems unreliable. Why?

SOLUTION

System 7.0 can dislike some 1M ROMs. This can be solved by using a newer version of the MacOS or by using a 512K ROM.

PROBLEM

I have MacOS 8.0/8.1 and it won't work! I have a 512K ROM from a IIci and a 68030 Amiga.

SOLUTION

If you use *Fusion*, you can use MacOS 8 even on a 68030 Amiga but you need a 1M ROM image. In *ShapeShifter*, you need a 68040 and a 1M ROM.

PROBLEM

I have set up *Fusion* for using Virtual Memory, and configured the Memory control panel. However, when I reboot, a window with a bomb appears!

SOLUTION

Make sure you have a MMU, (check the ShowConfig program in the Tools folder in your Workbench partition). In the memory settings of *Fusion*, double check that the memory mode is set to Virtual Memory and that 'region' is set to high and not low.

PROBLEM

I have MacOS 8.5 on CD, and have a 68040 and a 1M ROM. It won't install. Why?

SOLUTION

MacOS 8.5 and later is PowerMac only. Currently, there are only 68K Mac emulators for the Amiga, the latest version of MacOS you can use is v8.1.

PROBLEM

I'm trying to use Virtual Memory on *ShapeShifter* but it fails to work. Why?

SOLUTION

***ShapeShifter* doesn't support Virtual Memory; only *Fusion* does.**

PROBLEM

I have purchased *Microsoft Word 5.1* on floppy disks. I am informed they are double density Mac disks, but my Amiga with double density disk drive won't recognise them. Why?

SOLUTION

To read Mac double density disks, you need extra hardware, since the Mac double density floppy drive uses a different recording method from Amigas.

PROBLEM

My MIDI packages crash. Why?

SOLUTION

Many MIDI packages 'hit the metal' – they expect the Mac's hardware to physically be there. *Fusion* can cope with some of these packages.

I hope you now have a smoother ride trying to emulate a Mac. Check the *AFCD*. It has plenty of material regarding Mac emulation. Good luck!

There is some great graphic design software for Macs.

The system folder is the equivalent of the Amiga's Sys: partition.

don't actually own a Mac, you would be advised to look out for an older 68K Mac, such as IIci, IIcx, IIsi, etc. This will not only give you legal access to the ROM but, hopefully, it will also give you plenty of Mac software to go with it.

There are two things to bear in mind. Firstly, don't buy Mac software on double density Mac disks as your Amiga cannot read them without special hardware. You can only really use Mac software that comes on high density floppy disks. Of course, to access these you will need a HD disk drive, such as the Power XL, or a floppy drive connected to a Catweasel. Contact an Amiga dealer about the options you have regarding HD floppy drive access. Secondly, if you only have a double density floppy drive, all is not lost because if you have a CD-ROM drive, you can look out for Mac software on CD-ROM discs. Apple adopted CD-ROM early on the Mac, so there is plenty of Mac software on CDs.

You can now run *Microsoft Word, Excel* and *PowerPoint*. Microsoft develops a small range of software for the Mac, and these industry standard products will run on your virtual Mac very well. The latest version *Office '98* won't run on a 68K Mac, but the version 4.2 will. *Office 4.2* contains *Word 6, Excel 5* and *PowerPoint 4*. All of these are industry standards and run very well on *Fusion* or *ShapeShifter*. You will need to have a 8M virtual Mac but it will also run on System 7.0 and will run very nicely on any 68030 or better Amiga. It comes on HD floppy disks and CD and can be found for as little as £15.

TOP TIP

PHYSICAL

Virtual Memory slowing you down in any application? Have you allocated more virtual memory than you physically have? It's best not to have more virtual memory than physical memory – for example, if you have allocated 16M to your virtual Mac, don't have more than 16M of virtual memory!

AF63 (Sept 94) – Commodore go bust. We run a competition to get a job at Team 17 (Andy "Worms" Davidson won it), and review Workbench 3.1

AF72 (June 95) – Commodore sold to Escom in Germany. MacroSystem Draco announced. AF celebrates ten years of the Amiga.

You can mount any number of hardfiles in Fusion.

MSHardFile0 The MacOS BootDisk
MSHardFile1 Your Mac's 'hard disk' prepared with Hardfile Setup...

QUARK EXPRESS

The question is not which publications are created using *Quark* but which ones don't. Indeed, *Amiga Format* has been produced using this industry standard DTP package and your virtual Mac will run *Quark* very well. It is to be found on HD floppy disks as well as on CDs. Recent versions require MacOS 7.5+. Make sure that the version you buy works on 68K Macs. I purchased v3.2 for £10 – that's cheap!

PHOTOSHOP

The industry standard for image manipulation, Adobe's *Photoshop* is yet another reason to emulate a Mac. Note that the latest version 5.5 is PowerMac only and that version 4 is not recommended on 68020/30 Amigas. However, version 3 runs very well on a 68030 Amiga and can be found on HD floppy and CD once again. But be warned: *Photoshop* eats memory; this one is for 12M+ virtual Macs only!

PAGEMAKER

Yet another excellent Adobe product and a serious contender to *Quark, PageMaker* will run very smoothly on any Mac emulator. Versions up to 6.5 run on 68K Macs, though you won't find this one that cheaply, since it's not that old – it came out in 1997.

TOP TIP

REBOOT

In order to give your virtual Mac the best of your Amiga's resources, try rebooting before firing up the virtual Mac. That way, you're Amiga will be able to give it the best it has got!

ACROBAT

Moaning about how the Amiga's PDF viewers are a little substandard? Why not use Adobe's own PDF reader? It's free!

CLARIS/APPLE WORKS

Not an industry standard, but this super cheap integrated office suite has so many tools for its asking price, you'd be a fool not to snap it up!

The latest – *Apple Works 6* – requires a PowerMac, but the previous version 5 will run very nicely, even on a 68020 virtual Mac. Of course, there are many other packages you can use on your virtual Mac. Although these packages may have costed £300+ brand new (excluding *Claris/Apple Works* which has been about £60-£100), if you keep your eyes peeled, you should occasionally find some very good offers in your local paper. The Diamond Freeads always has bargains like these, too.

Look out as well for cheap second-hand Macs; these can be bought for next to nothing and come with lots of software. For example, I bought an old and outdated MacIIx for £20 in 1997 just for the software. I later sold just the machine for a tidy profit and kept the software.

If you are looking for gear on the Internet, check out http://www.ebay.co.uk where you will often many bargains.

If you are in the US, check out http://www.ebay.com where there are even more bargains. The only problem with that particular site is that you have to bid in an auction, but if you know the prices and have the nerve to bid what you're prepared to pay, you'd be surprised what's there!

Nick Lamburn

EXTRA HELP

Unfortunately because this is the last issue of *Amiga Format*, we have been unable to get the software we had hoped to on to the CD.

If you would like to obtain a copy of the System 7.0 filedisk, visit http://www.oruk-amigan.free4all.co.uk to download it – it's about 3M. Also if you wish to discuss issues described here, feel free to send me an e-mail at oruk-amigan@free4all.co.uk. I'd be delighted to be of assistance!

Just Imagine

Andy's not going to get to finish this tutorial now, which is a shame; he was doing rather well – we'll get the Modelling section done though...

Before we get stuck in, I feel the need to explain something about the backdrop image we are using; it's only there to serve as a rough guide to the object we are building – and to make sure we are building everything to scale (scale is extremely important). The image isn't of a high enough quality, however, to work on a 100% accurate model of this bike. In a nutshell, there are some parts I have to design myself because they are not visible on the image we have (engineers' diagrams would be useful methinks).

But I know you are desperate to get into some modelling and so you shall.

Make the RIGHT VIEW full screen and set the zoom to 4.0. We will be working from a different backdrop image, which is a close up of the rear section of the frame. Load the file "BikeRear_bg.iff" as a backdrop image. It will be a bit easier if we work on this section at a slightly larger scale as there's some finer detail to build – we can easily make it match up to the rest of the frame once it's built.

It's not that difficult to accidentally overwrite hours of work with a bare axis – thus speaks the voice of experience



AF32 (Mar 92) – We reveal that the A570 (still known as the A690 in this issue of AF) is to go on sale in March 1991. We also have thirteen pages rounding up new CD-based titles.

Contents:

If you miss any tutorials in this series, call our back issue hotline on 01458 271102.

1 To start off we need one component from last month's effort. Load the model you built and delete everything apart from the crank-housing. Reposition the object so that its axis is roughly in the centre of the large cog shown on the backdrop. It's a bit small. Enlarge it (in all axes) until it matches the scale of the backdrop image. You can do this visually; scale it up so that the outer edge is just inside the smallest cog.

2 Next we'll add that tube-section that sticks up from the middle of the crank-housing. Add a primitive tube with a radius of 5.0 and a height of 50.0. Check CLOSE TOP. Go into PICK EDGES mode and Use EDGE FILTER with its default settings. The edges around the top end of the tube are selected. Make the edges SHARP.

CUP users can just check the "sharp edges" switch in the primitives window to save on a bit of labour.

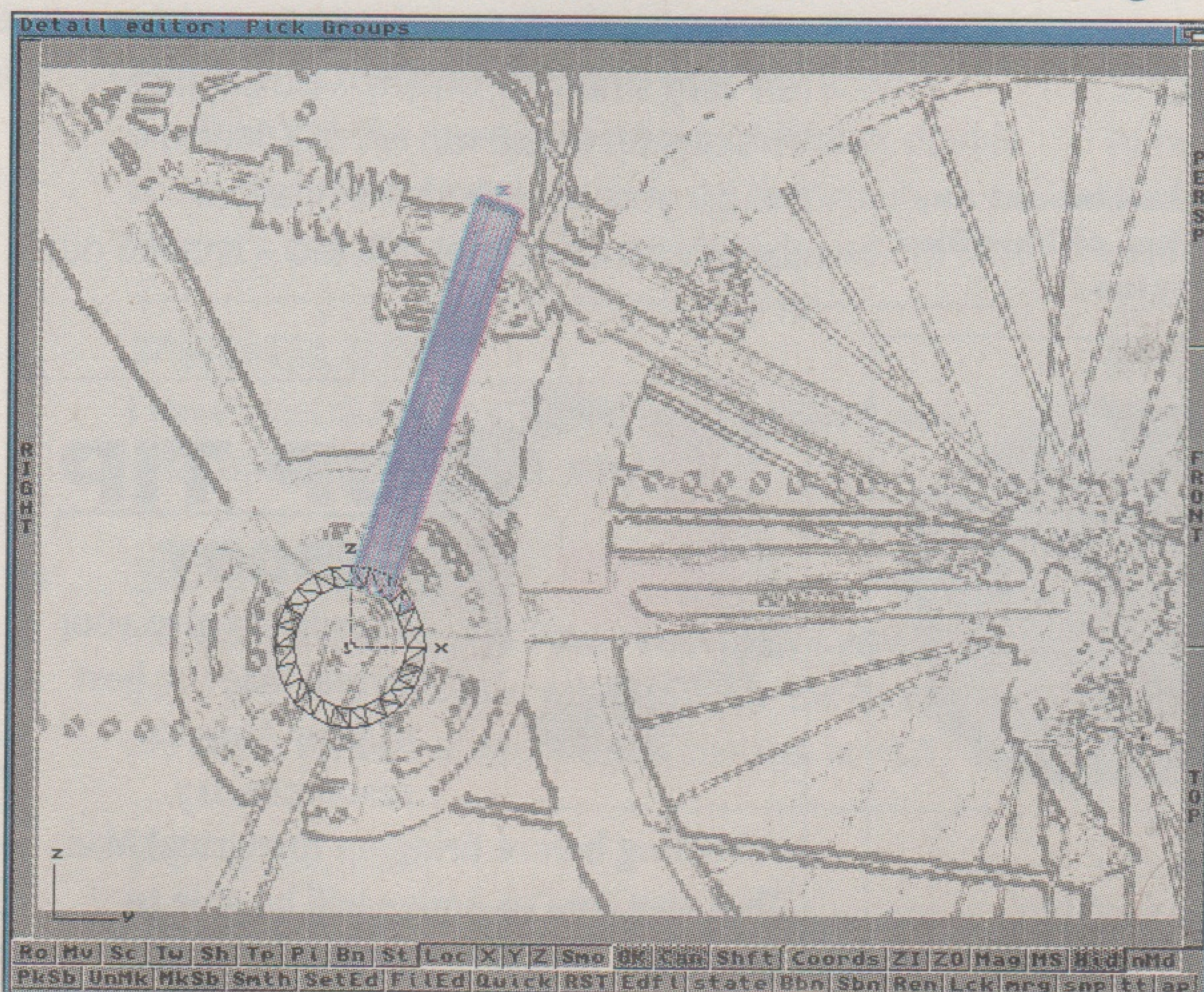
We should add a small bevel to the top of this tube. It's amazing how such a seemingly insignificant detail can enhance a model. Creating the bevel is very easy. Go into PICK FACES mode [RA 5] and set the PICK METHOD to DRAG BOX [F8]. Hold down shift and drag a box around all the points on the top end of the tube. Doing this will select all the faces at the top end of the tube. We use EXTRUDE to start off the bevel, like this:

We want the faces to extrude only in the Z axis so the length must be set to "0.0001" (the smallest value imagine will accept). The extrusion is applied via "Z translate". Enter a value of 1.0 in that string. Good stuff.

To form the bevel, go into PICK POINTS mode, hold shift and drag select only the newly created point at the very top of the tube. Select SCALE [s] and reduce them to 0.9. You now have a nice bevelled edge on the tube, though it's a little on the high side. Use the TRANSFORM window to translate the selected points half a unit in minus Z.

Position the tube over the corresponding section of the backdrop image (the tubes axis should be sitting on the inside edge of the crank-housing). Rotate it in X until its alignment matches up, and scale with LOCAL (to avoid shearing) active [l] in X and Y until the tube is the correct width.

A place for everything and everything in its place.



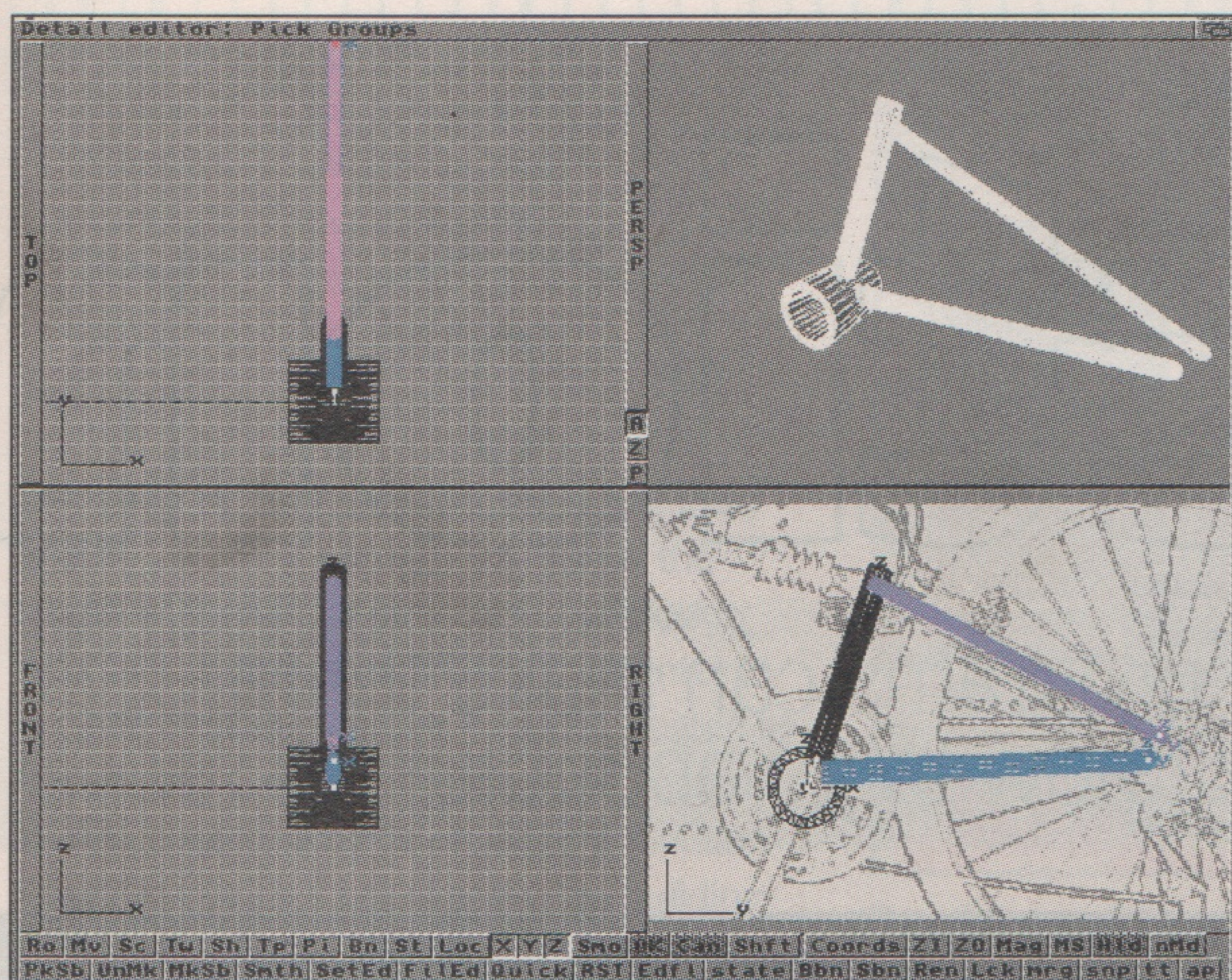
3 This next bit is a killer. Add a primitive sphere with Stagger Points OFF. In PICK POINTS mode, delete all the points in the top half so you end up with a hemisphere. Rotate the hemisphere 90 degrees in X so that the open end is facing left in the RIGHT VIEW. Use the TRANSFORM requester to align "axis only" to 0.0 in all axes.

Move the hemisphere to the right most end of the lower bar on the triangle section (Y 54.5, Z -12.5) and scale it down to more or less the same width as the bar at that end (size is 2.3 for all axes here). The backdrop is your guide.

In PICK EDGES mode, hold shift and drag a box around the points on the open end of the hemisphere (zoom in if it helps, then reset the view and set zoom to 4.0 again) and Extrude the selected edge minus 85 units with 12 sections, Z Scaling at 1.25 and Z Translate at minus 3.0. That gives us the lower bar. Copy then paste the bar. Position the newly pasted bar to Y 58.0 and Z minus 6.5. Rotate it in X minus 28 degrees so that it sits over the top bar of the triangular section on the backdrop. Resize it (local mode [l]) in X and Z until it's about the same thickness as the corresponding component.

Select the lower bar again, and scale it in X to about 0.7 so that it's a slightly oval tube. You should have something like that shown in the picture above right.

Now, these two bars that form the triangular section need to be modified so that when they are mirrored to get the bars on the opposite side, there will be room enough for the rear wheel to slot in. This is another job for a PATH. Go into QUAD VIEW (all views on screen) and add an OPEN PATH. Select the path then select EDIT PATH. Click the left most point in the



It might look like an instrument of torture, but it isn't.

RIGHT VIEW and select FRACTURE to create a new point in the path.

You should have a path with three control points. The path needs to be formed into a curve that the bars can be CONFORMED to. It will be easier if you edit the path in the TOP VIEW, while using the RIGHT VIEW to see where the points are positioned a bit more clearly.

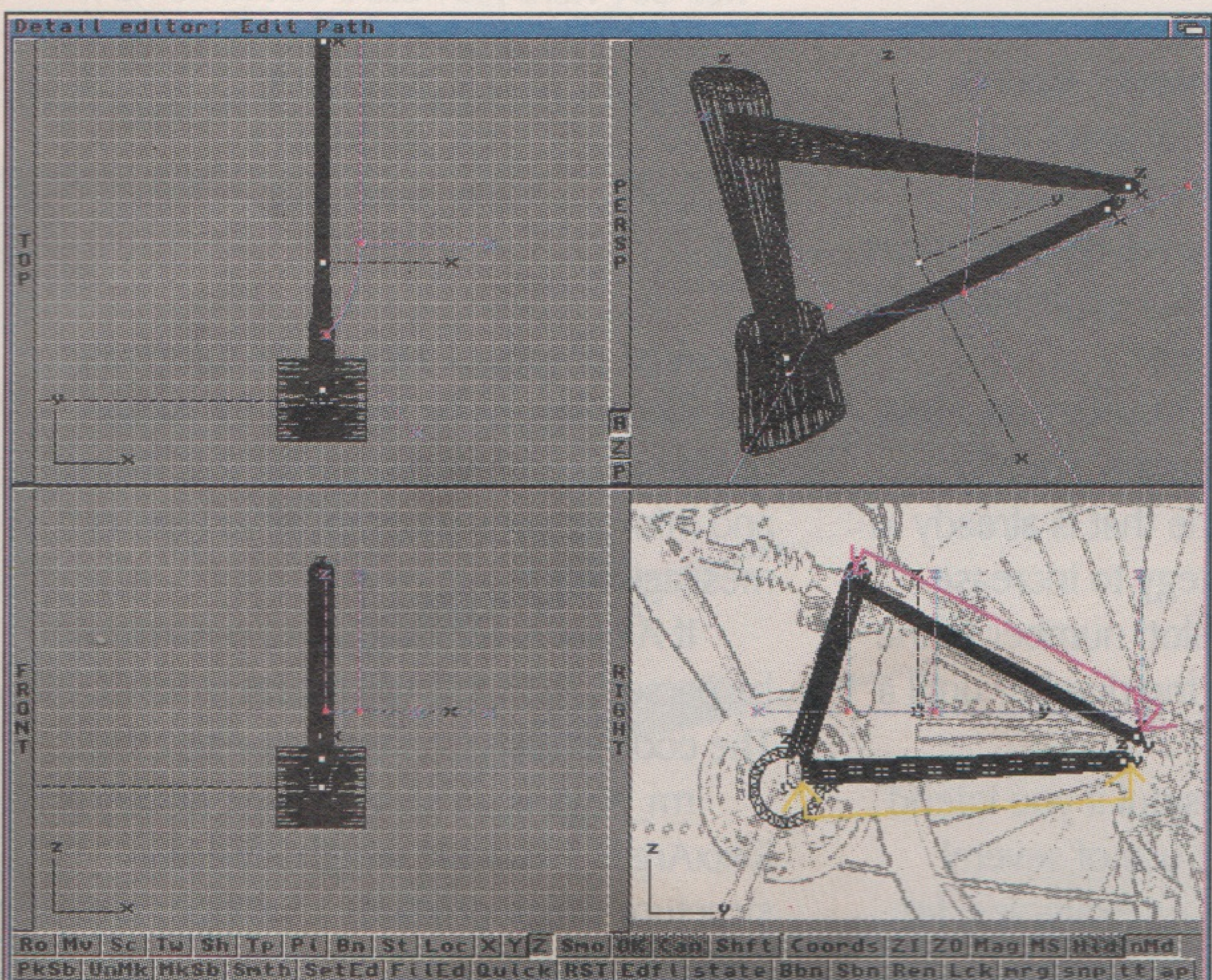
Make sure the Backdrop is loaded into the RIGHT VIEW (click anywhere in the view and load it). Click the left most point and drag it in Y until it aligns with the left most end of the top tube. Rotate the point about minus 45 degrees in Z. Deselect the point. Hold down shift and select the middle and right end point. Translate them 10 units in X (use the grid to do it visually, a unit here or there is of no consequence). Deselect the points, then reselect the right-most point. Move it in Y until it aligns with the right end of the top tube. Be as accurate as you can; the end points of the path MUST be in the same Y positions as the extreme ends of the tube, or things will go the shape of a pear. The middle point should be moved about a third of the way from the left point. Take a look at the image below to see exactly what needs be done.

This is what it's all about. Select the top bar, then from the FUNCTIONS menu select CONFORMATIONS – CONFORM TO PATH. It can't get any simpler, can it?

Edit the PATH again, but this time move the end points so that they match up with the extreme ends of the lower bar in Y. Now CONFORM the Lower Bar to the PATH. Done? Hold down shift and click the path, then the two bars. Group them. Copy then paste the group. Use the TRANSFORM requester to mirror pasted group in X (enter minus 1 in the X string). You now have an almost fully assembled rear section as seen in our image above, right. Hurrah!

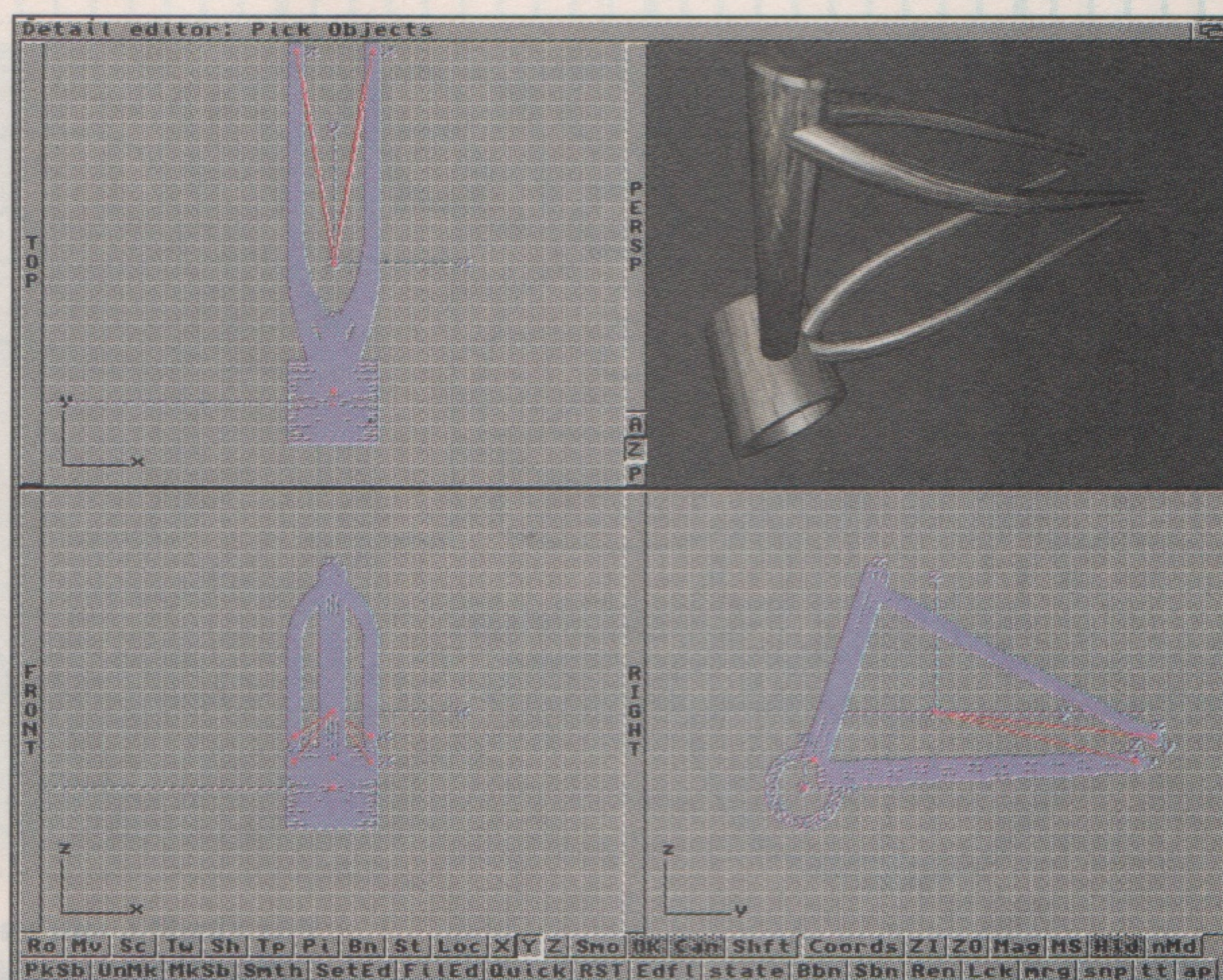


AF39 (Oct 92) – A600 cut in price by £100 to £299 and first rumours of AGA (then called AA and dropped because of the alcoholism connotation) appear. A3000 drops in price (from £3,000 to £1,300) and AF is now officially the best-selling 'male interest' magazine in the UK with a circulation of 161,256. We also review the A570.



Make sure the path ends along with the bars' ends.

It might be a good idea to group all your objects and save them as "FRAME_REAR.iob". Try to get into the habit of saving frequently, and save to a new file when you make any major changes. It's not that difficult to accidentally overwrite hours of work with a bare axis – thus speaks the voice of experience.



It's beginning to actually look like part of a bike now – which is the whole point.

4 There's not going to be enough space to cover modelling the suspension this issue, so I'll finish off by making a start on the wheel hooks.

As you've saved what you've built thus far, delete all objects from the workspace – we can load them back in later. Go into the FRONT VIEW and add a primitive disc with default values. In PICK POINTS mode, delete the centre point. Also delete the bottom centre point, and one point on either side of it (four points are deleted in total). Copy the disc and paste a new disc. Scale the new disc by 50%. Go back to PICK POINTS mode again and delete all the points in the lower half, so you end up with a semi-circle.

Join the two objects.

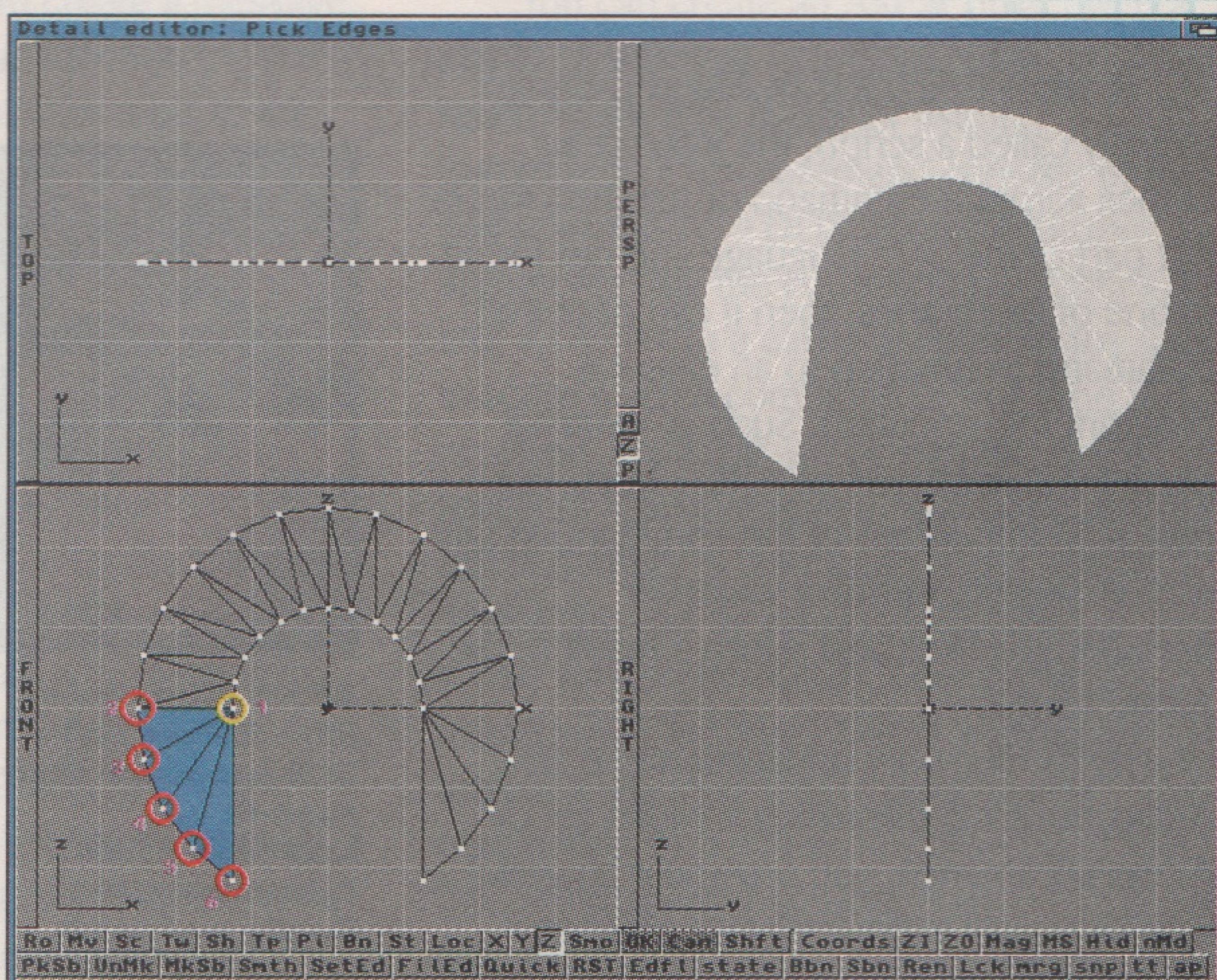
Get yourself into PICK EDGES mode, and set the PICK METHOD to LASSO. Hold Shift and select all the edges of the inner semi-circle with the LASSO. Select SET EDGE LINE from the FUNCTIONS menu. Deselect the edges. Now use the LASSO to select only the edges on the top half of the outer disc (i.e. a larger semi-circle of edges). Now select FILL TO EDGE LINE from the FUNCTIONS menu. You have just created a bunch of faces without any real effort at all. Cool, eh?

Unfortunately, it isn't all so hassle free. There are a few faces that need adding to the lower half by hand. Go into ADD FACES mode, and start adding faces from the bottom left point of the inner semi-circle. Simply click away forming faces to the outer edge, then do the same on the right side. The image illustrates this quite clearly.

Save the object as Wheel_hook.iob – we'll need it later.

And that is where we call it a day. I would have finished off the wheel hooks next month, and something to hook into them, and I would have built the wheels too. But now I can't, which is a pity.

Andy Kinsella



The FACE ADDING goes in sequence – click 123, click 134, click 145, click 156. fine business.

THE RIGHT PATH

We should always be making good use of Imagine's paths as they are a powerful modelling tool. However, it is possible to extrude along objects other than paths.

If you're not used to them, it can be tricky to describe complex shapes with paths. What you can do instead, however, is to use ADD LINES and describe your shape with lines instead. The extrusion might not be as clean as it would be with a real path, but it's a useful feature to know about – conformations only work with real paths.

There is an arexx script for V5 that will convert lines (edges) to real paths; which is nice.

Check out the support site at http://cadtech.demon.co.uk

Program Perfection

On the CD
-In_the_Mag-/Program_Perfection

Supporting ARexx in your programs can make them much more useful. Find out how to go about it.

At a simple level, ARexx is just another general purpose programming language, somewhat like a cross between BASIC and C. Like BASIC it is interpreted and doesn't force you to declare variables before you use them, and yet it shares much of its style and idiom with C.

For clarity, we've added the ¶ sign in the listings to show where you need to enter a Return.

Contents:

Make sure you don't miss a tutorial in this series. Call our subs hotline on 01458 271102.

If the interpreter comes across a command or function that is not found in one of its libraries, it can pass it to an external program

What makes ARexx interesting, however, is its extensability.

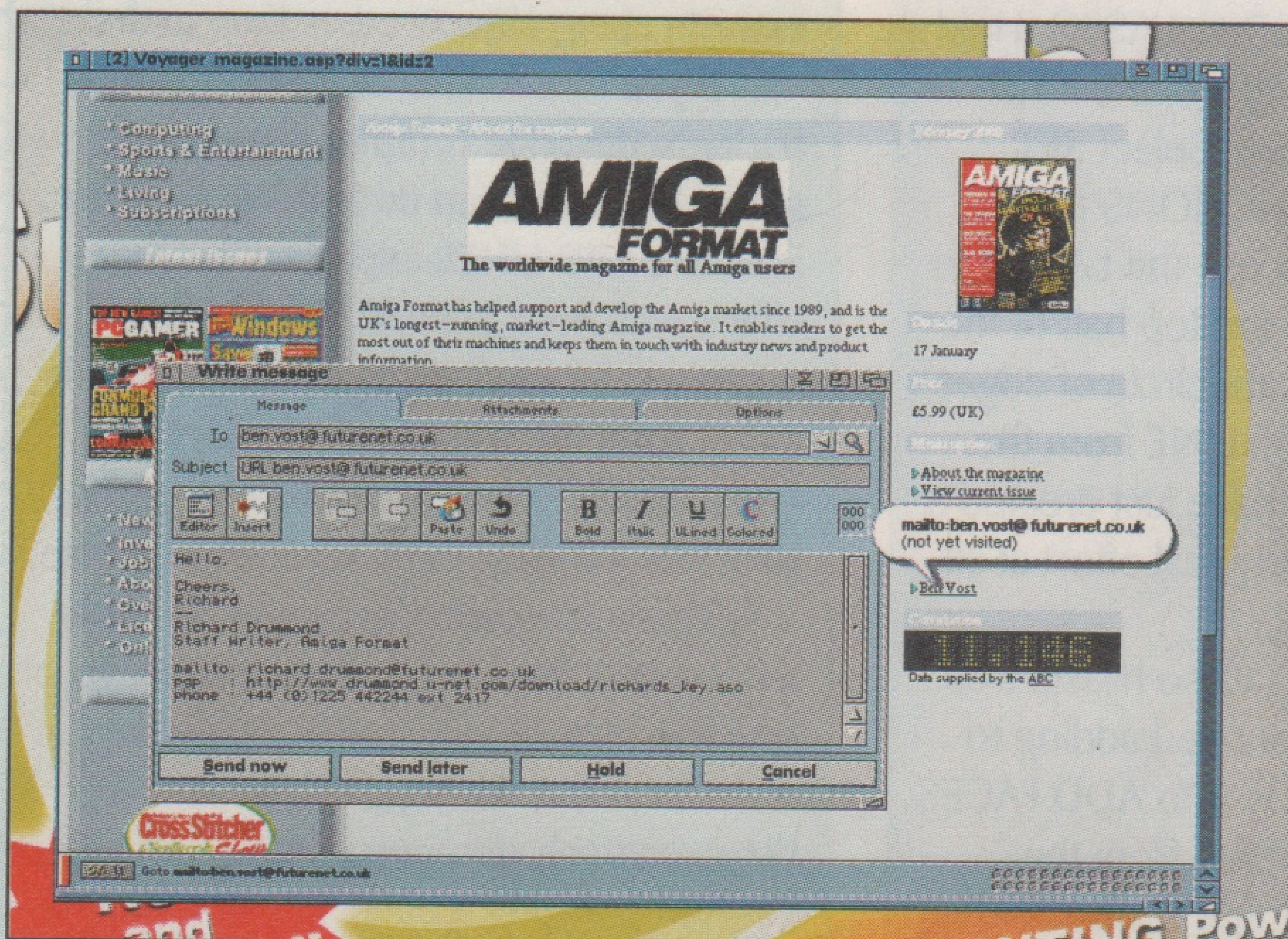
If, while executing an ARexx program (usually called a script), the interpreter comes across a command or function that is not part of the core language and not found in one of its libraries, then it can pass that command or function to an external program for execution. Such an external program is known as an ARexx host. The host is free to interpret the command in any way its sees fit, perform whatever processing it likes and return a result to the ARexx script.

By turning your application into an ARexx host and furnishing it with a set of ARexx commands, you provide a powerful way for a user to control your program, perhaps to automate repetitive tasks. But it also permits a flexible means of interprocess communication: ARexx can become the translator between two programs that would otherwise not be able to talk to each other.

As an example, consider the browser, Voyager, and the email client, YAM. They each know nothing about each other. But with with two simple ARexx scripts you can couple them together so that clicking on a web address in a mail that you are reading in YAM will open the corresponding page in Voyager, while clicking on a mailto: link in Voyager will open a new mail to that address in YAM.



AF105 (Christmas 97) – Power and DCE announce their soon-to-be launched A5000. CyberStormPPC finally reviewed.



Voyager and YAM can speak to each other with the magic of ARexx.

BEING THE HOST

An ARexx script has a default host, usually the ARexx server itself. The default host is changed with the command 'Address'. Communication between ARexx and an external program takes place via Exec's message passing system: ARexx performs the rendezvous with a named, public message port, known as an ARexx port.

The name of this port is supplied as an argument to the 'Address' command within a script. Typically, your application will create a port dedicated to talking with ARexx, but it is possible, although rather more involved, to share a port which is also being used for other purposes.

There are a couple of points to consider when naming your ARexx port.

Firstly, like all Exec names, case is significant: 'MyPort' and 'myport' are considered to be distinct names. The standard practice is to derive the port name from the base name of your application and for it to be all in upper case.

Secondly, the name of your port must be unique. Attempts to create a public message port with a name that is already in use will fail. A usual strategy to increase success is to append a 'slot' number to the port name and to bump the number until a unique name is found.

This is particularly useful if you intend to permit the concurrent use of several copies of your program. As examples, for our project, AFMore, we could use AFMORE as the base name or start with AFMORE.01 and increment the slot until we find one that's free. I have also specified that the port name may be supplied as a startup parameter for AFMore. This means that client software wishing to launch and communicate with a copy of AFMore can pick the port name itself to avoid confusion.

ARexx sends commands to the host's message port packaged in the ARexx message (RexxMsg) format. This is an extension to the basic Exec message and is defined in <rexx/storage.h> as:

```
struct RexxMsg {¶
   struct Message rm_Node;¶
   APTR       rm_TaskBlock;¶
   APTR       rm_LibBase;¶
   LONG       rm_Action;¶
   LONG       rm_Result1;¶
   LONG       rm_Result2;¶
   STRPTR     rm_Args[16];¶

   struct MsgPort *rm_PassPort;¶
   STRPTR     rm_CommAddr;¶
   STRPTR     rm_FileExt;¶
   LONG       rm_Stdin;¶
   LONG       rm_Stdout;¶
   LONG       rm_avail;¶
};¶
```

For most purposes a lot of the information in a RexxMsg can be ignored. rx_Action contains a command code for this message, and informs your program what type of message this is.

If ARexx is sending you a command to be parsed, then this will be set to RXCOMM. The code can also contain modifier flags.

rm_Args is an array of type RexxArg. A RexxArg is a variable length read-only structure which provides a wrapper around a plain C string.

```
struct RexxArg {¶
    LONG      ra_Size;¶
    UWORD     ra_Length;¶
    UBYTE     ra_Flags;¶
    UBYTE     ra_Hash;¶
    BYTE      ra_Buff[];¶
};¶
```

The array ra_Buff contains the string itself and ra_Length it's length (ra_Size is the length of the whole structure). A RexxArg structure is always handled via a pointer to ra_Buff. This means that it can be treated as a read-only C string. The standard shared-library, rexxsys.library, provides a function CreateArgString ( ) to simplify the building of your own RexxArg strings.

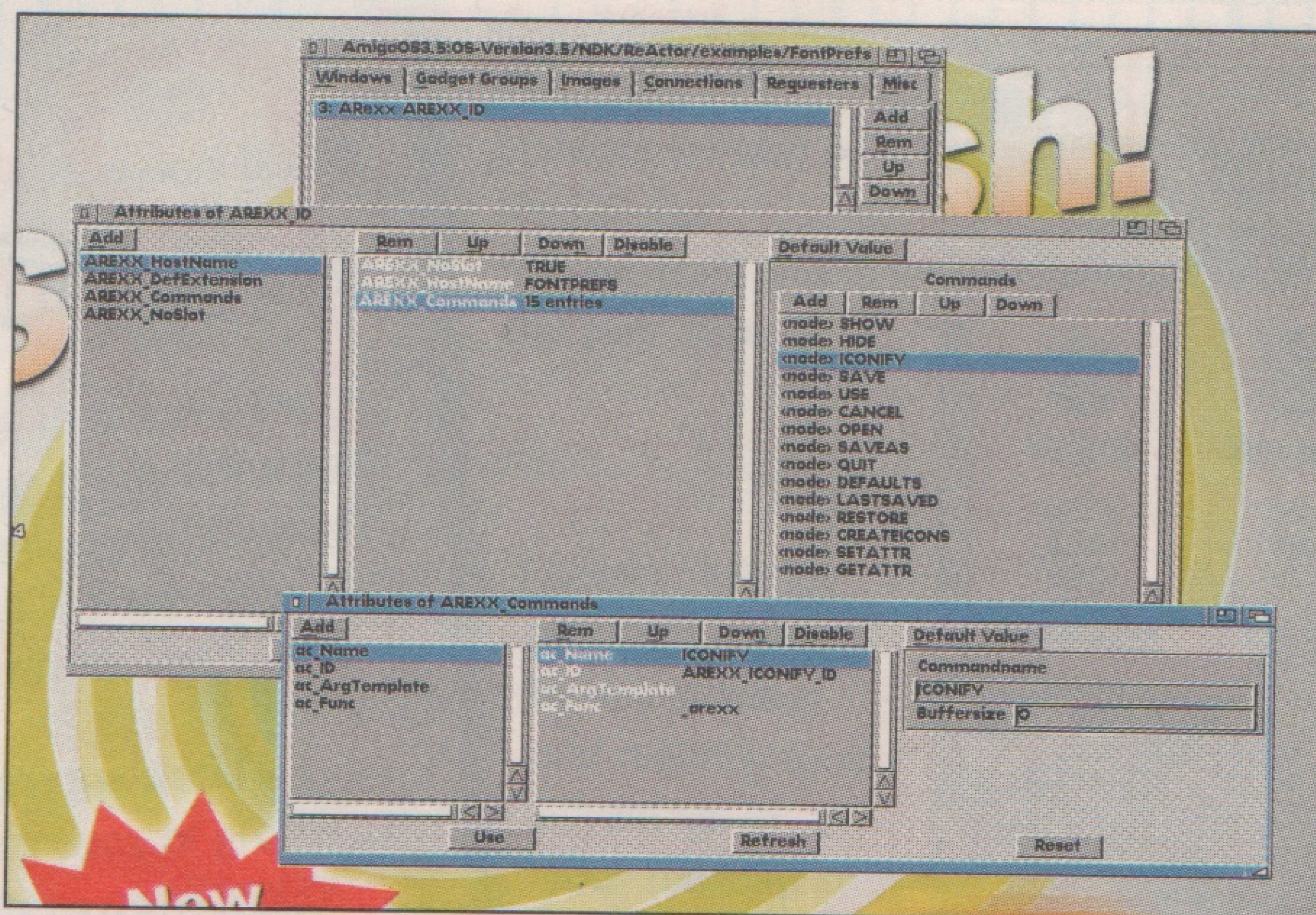
If you are sent a simple command then the first entry of array rm_Args will be the entire command string to be interpreted. You can parse this string in anyway you please, but a simple way is to use the dos.library function ReadArgs ( ) which performs the standard AmigaDOS template parsing. To implement this, examine the first word of the command to find out which command you've been sent and then apply ReadArgs ( ) with an appropriate template for that command to find what arguments you've been given. Now you can perform whatever processing is necessary in your application to carry out the command.

The flip side of the coin is sending commands or scripts to ARexx for it to process – this is a very useful facility

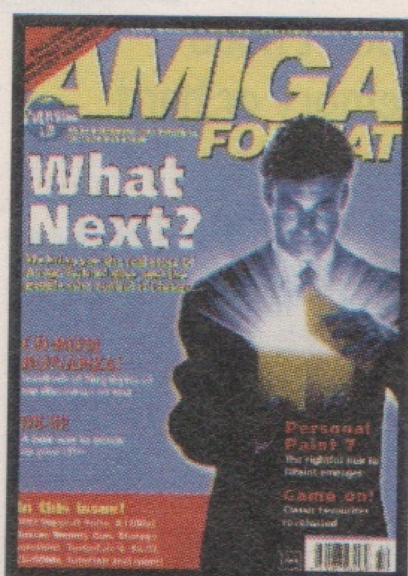
The rm_Result1 and rm_Result2 fields in the RexxMsg are the places to return any results from a your program to ARexx. Result1 is a primary result code, and is interpreted the same as a DOS return code. RETURN_OK means the command was successful, RETURN_FAIL means that an an error occurred.

If the command code for this message has the RXFF_RESULT flag set, then ARexx is expecting a string (a RexxArg) as a secondary result in (which is accessed in a script via the standard ARexx variable RESULT).

If an error has occurred, then you can return an error message here. A numeric result must be first converted to a string.



Reactor provides a GUI for building your ARexx interface.



AF94 (Feb 97) – Quikpak announce new machines including a "luggable" laptop. This issue also had the last AFCD done by Ben. EMComputergraphic then take over the production of the CD – and have been doing it brilliantly ever since.

Once you have put whatever results are necessary into the RexxMsg you must now send it back to ARexx with a call to ReplyMsg ( ).

BEING THE BOSS

So much for dealing with commands that ARexx sends you. The flip side of the coin is sending commands or scripts to ARexx for it to process. This is a very useful facility and makes it possible to implement a powerful macro system within your software.

All that is required is to build an appropriate RexxMsg structure and send to it to the ARexx server's message port - which is named REXX. To create a message, you must use the rexxsys function CreateRexxMsg. You pass this a ptr to the port where you want replies to this message sent (your ARexx port), the name of the default host when executing this command or script and the name of the default filename extension to use when looking on disk for the script. If you don't supply the last, then extension will be '.rexx'.

Before you PutMsg ( ) the RexxMsg to the ARexx server, you must fill in a few details. You have to create a RexxArg with your command string or script name and install in in rm_Args [0]; then rm_Action should be RXCOMM to tell ARexx that this is a command. If the script or command requires a console for default input and output, you have to set up rm_Stdin and rm_Stdout to an appropriate console stream. When everything's ready you can safely send this message to ARexx. Note that interpretation of the command or script will take place asynchronously: you will get no immediate result returned. When ARexx completes the script or encounters an error it will reply to your RexxMsg with rm_Result fields informing you of the success or otherwise of the execution. It is simple to distinguish between those messages that arrive at your ARexx port that are commands to be interpreted and those that are replies to messages you have sent to Rexx. The former will have a node type of NT_MESSAGE, the latter NT_REPLY.

MAKING IT EASIER

As always, we are looking for the laziest possible way for implementing an understanding of ARexx within our programs. We don't really want to have to deal with it on the low level of Exec messages and message ports. Luckily, there are several freely-available modules available that have been created by various developers over the years and provide a simpler API for coping with ARexx. For example, have a look at the SimpleRexx package in release 2.0 of the NDK.

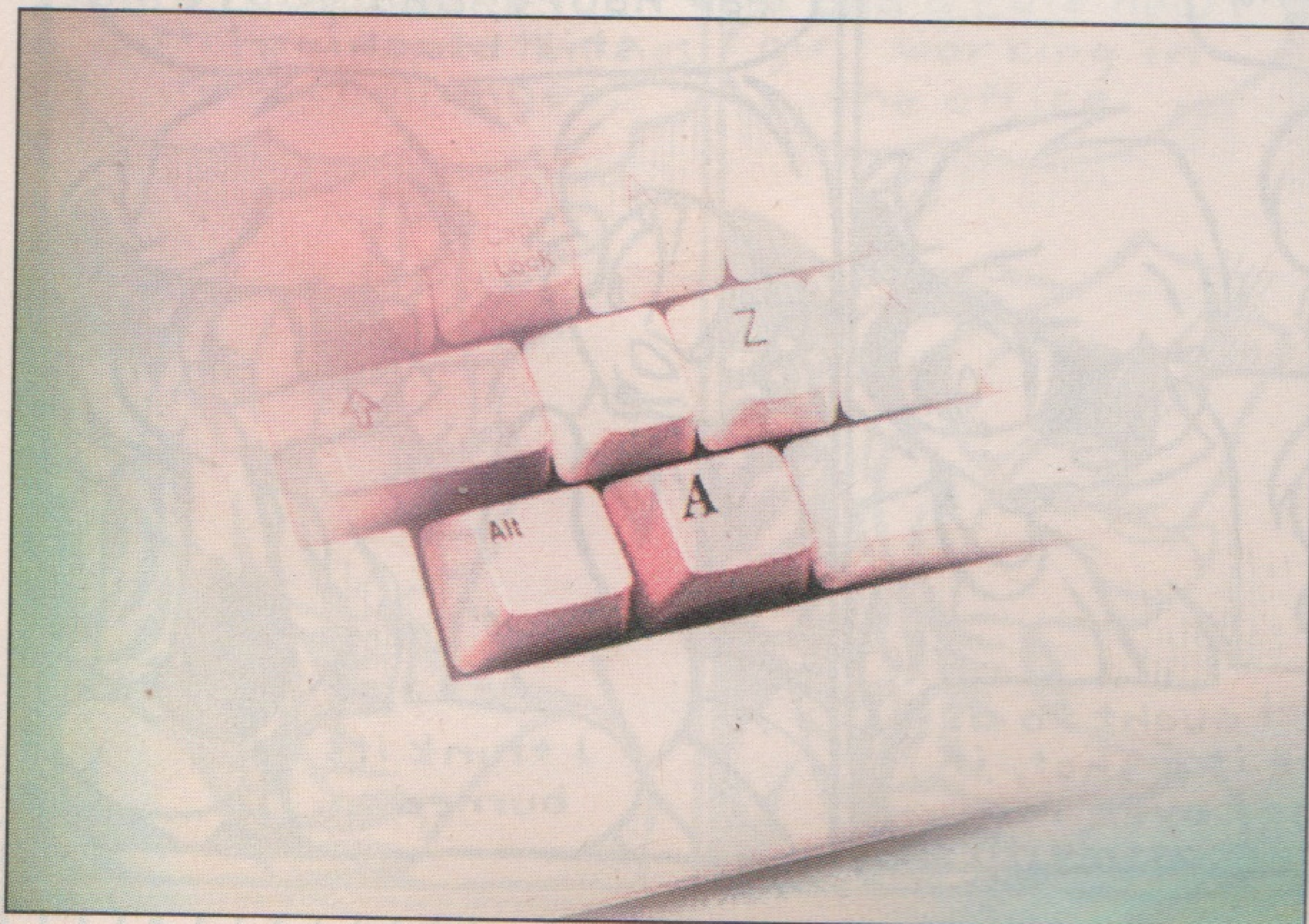
Reaction supplies us with an object-oriented interface to the world of ARexx with its BOOPSI arexx.class. An object of type arexx.class provides us with an ARexx port, handles ARexx communication, contains a list of ARexx commands which can be sent to that port and performs the parsing of these commands.

You can create an ARexx object with a call to NewObject ( ) and you must pass the name of the port and your list of commands. Each command consists of the command itself, a DOS template for the arguments that the command understands and a pointer to a callback function to execute when a command of that type is received. Your task we be notified of the arrival of ARexx messages signalling; the signal number is a attribute of the ARexx object and can be found by GetAttr ( ). When a message occurs, you invoke the object's AM_HANDLEINPUT method and the class will take care of parsing any commands. You can send a command to the ARexx server by calling the AM_EXECUTE menu.

As a final word, Reactor, the new Reaction GUI builder which is part of the OS3.5 NDK, allows you to specify an ARexx object using the arexx.class – you can now add an ARexx capability to your software with ease.

Richard Drummond





A MATTER OF STYLE

It is worth pointing out that the ARexx commands that an application supports merely provides another interface for accessing and controlling that application. You should therefore spend us much effort designing that interface as you would designing the graphical interface.

Firstly, the set of ARexx commands should be sensibly named and not be too complex. Try to aim for many simple commands rather than a few complex ones; after all, simple commands can be strung together in a script to perform the same effect. But try keep the number of things that a user has to remember to a minimum. Try to use a familiar style: examine how other developer's have implemented their ARexx interfaces and emulate the style. It will make your program easier to learn. Lastly, make sure you document your ARexx interface thoroughly. Always completely state what arguments each command expects and what results it returns.



MailBag

Although we didn't know it at the start of the issue, this was anyone's last chance to send us a letter – if you wish to communicate with us further, write to afb...

GAMES MACHINE

Hi Ben,

You recently printed a letter from me (*AF134*) in which I expressed several purely personal opinions and I have had several emails and phone calls in general agreeing with what I said.

Your correspondent Phil Allen in *AF135*, who picked up my comment that the Amiga had outgrown Games anyway was, of course, right in what he said. My comment was following my assertion that I didn't play games and that, for me, games in the magazine were a waste of space.

The comment was really aimed at the brigade who still view the Amiga as a "games" machine and not as a serious computer but I take his points and must agree with him in most of what he says.

But the games genre is fiercely contested in the market place and is seriously undermined by piracy. With the next generation of small, portable appliances already reaching the market in vast numbers, with their upcoming ability to download things from the net direct via their in-built phone capability, things can only get worse if the next Amiga (if there ever is one?) tries to compete purely in this market.

Of course, it will have games capability, such as we present owners have never yet experienced in terms of speed, graphics and sound but as an aside, in my honest opinion, owners will have to buy a lot of that capability as an add-on, if the present owners of Amiga try to keep prices down, as I suspect they will.

If you have an efficient operating system at the heart, you don't need enormous amounts of memory or hard-drive space to run; the processor hungry/ram/hard-drive space consuming applications will be bought as people decide they need them.

But technology is changing fast and I suspect the home computer market will change radically in a very short time.

It is already divided into people who need computers for work or their own business reasons and the large number who only bought one in the first place because it appeared to do what they wanted at that particular time.

There is now considerable hype about the net – what it can now and will do for people in the future but again, in my honest opinion, most people don't want the attendant hassle of learning how to use a computer to get what they want.

If you were to offer for sale a handheld box that at the pressing of a few buttons would connect you to the net and enable you to download, music, films, games and the like to instantly view/listen/play on their home TV whilst they stay in the chair, it would sell in its millions worldwide in the developed countries, whatever the cost.

I'm sure most people would agree that such a "toy" is just around the next corner and, for sure, it isn't any kind of "home computer" in the same sense that our lovely migs are!

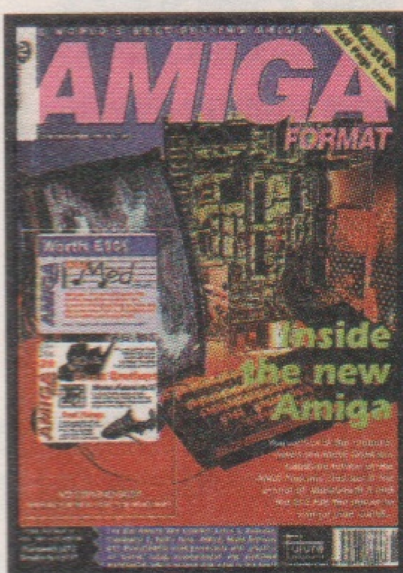
Cheers!

Ian Aisbitt
iana@messages.co.uk

Thanks Ian, I have to say I agree. The Amiga represents the last generation of true home computers, but I suspect that a lot of us take the amount of knowledge we have about our machines for granted – something that was highlighted when we started our complete beginners guides, the hardest writing there is in AF.

Potential new customers aren't going to want to have to deal with startup-sequences, MUI and stack sizes, nor are they going to want to deal with registries, IRQs or active desktops. People want Palm-style simplicity coupled with a great deal of flexibility.

Perhaps the new Amiga will offer that without the downside of limited usefulness. We'll have to see.

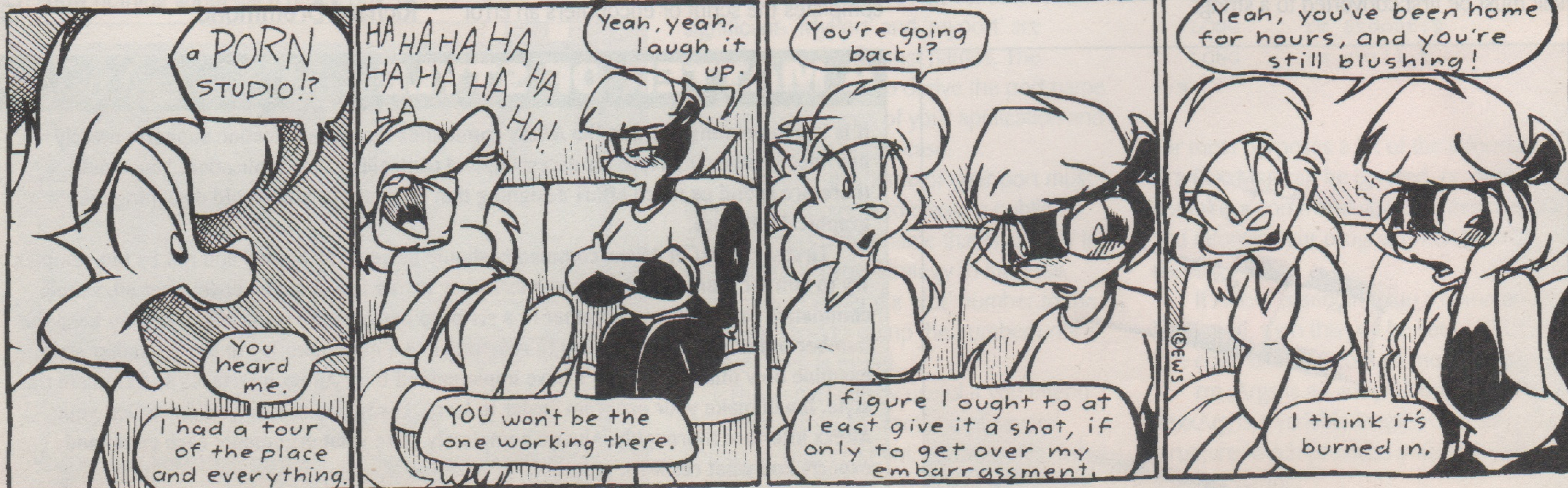


AF29 (Dec 91) – The launch of the new A500+ surprises everyone, including Commodore UK. AF even ran a compatibility chart in the mag.

Heretic II is a good example of a modern Amiga game.

Sabrina Online by Eric W. Schwartz ©1999

"Skunks can blush?"



Check out Sabrina Online at http://www.coax.net/people/erics/

SERIOUS FUTURE

Dear Sir,
Ian Aisbitt (AF 134, March 2000) makes a point with venom borne out of frustration. Many of us have felt the same way as Amiga passed from hand to hand over recent years before coming to rest in the Gateway stable.

Gateway shouldn't be criticised too harshly; they saved the Amiga, kept it all in one place during a time when it was vulnerable, while predators prowled out there. Amiga doesn't need "jobsworth" people; it needs enthusiasts to develop through to production and that is exactly what it's now got with the new owners. The future looks seriously good.

The tie-in with Tao is a brilliant stroke, giving the world's leading OS the ability to run any software at the same or greater speed from any platform, all the while retaining its own identity.

Would you buy a PC or a Mac, if on sale alongside, there was an Amiga, with a superior OS and the ability to run any software, a true cross performer?

In this way, it's possible to see Amiga selling with an edge in the market place, making the profits that elude the PC clones. Amiga could become the leading platform again in quite a short period of time; it has refused to die this far.

The future looks serious.

We need to see Amiga on sale, in the new kit, with a fast processor giving credit to the software it stands to run.

Andy Brown, Weedon

The only problem I can see with your argument is you say that the Amiga could be "making the profits that elude the PC clones". Part of the problem with the Amiga is that bits for it are expensive, which has prompted migration to other platforms. If the Amiga is to be successful then those prices would have to drop and you'd swiftly find the Amiga in the same boat as the PC profit-wise.

ABACKUP 5.22

Reference: *Amiga Format*, issue 129. Under Richard Drummond's PD Select (page 39) I refer to Denis Gounelle's "Abackup 5.22". The article states that the product is now freeware, and yet subsequent CDs (*AFCD50* included) are carrying the upgrade with information on how to register.

Is it freeware or shareware?

Martin Davies

As you know there is a gap between what goes on our CD and what's available on the net. Denis Gounelle made ABackup freeware after AFCD50, but it's now been sorted and you should have the freeware version on the CD that accompanies this last ever issue.



AF85 (June 96) – The very first AFCD and the Amiga gets sold again (or does it?) to Viscorp.

AFCD

I obtain my copy of *Amiga Format* by subscription and recently took advantage of your Tuesday technical help. However, due to my being very deaf, I sometimes have great difficulty with telephone calls, despite a hearing aid and a special phone. The result was a not very successful conversation.

I hope therefore that you will reply to my query by letter. The problem concerns your CDs and making better use of them.

As I have not been doing very well trying to access the information on *AFCDs*, I decided to follow your article: "The Complete Beginners Guide to the *AFCD*" in issue 128 (October 99). I also used *CD44*. Having copied the files lha, Installer, etc on to my HD, I then tried to install MUI and *ClassAct*.

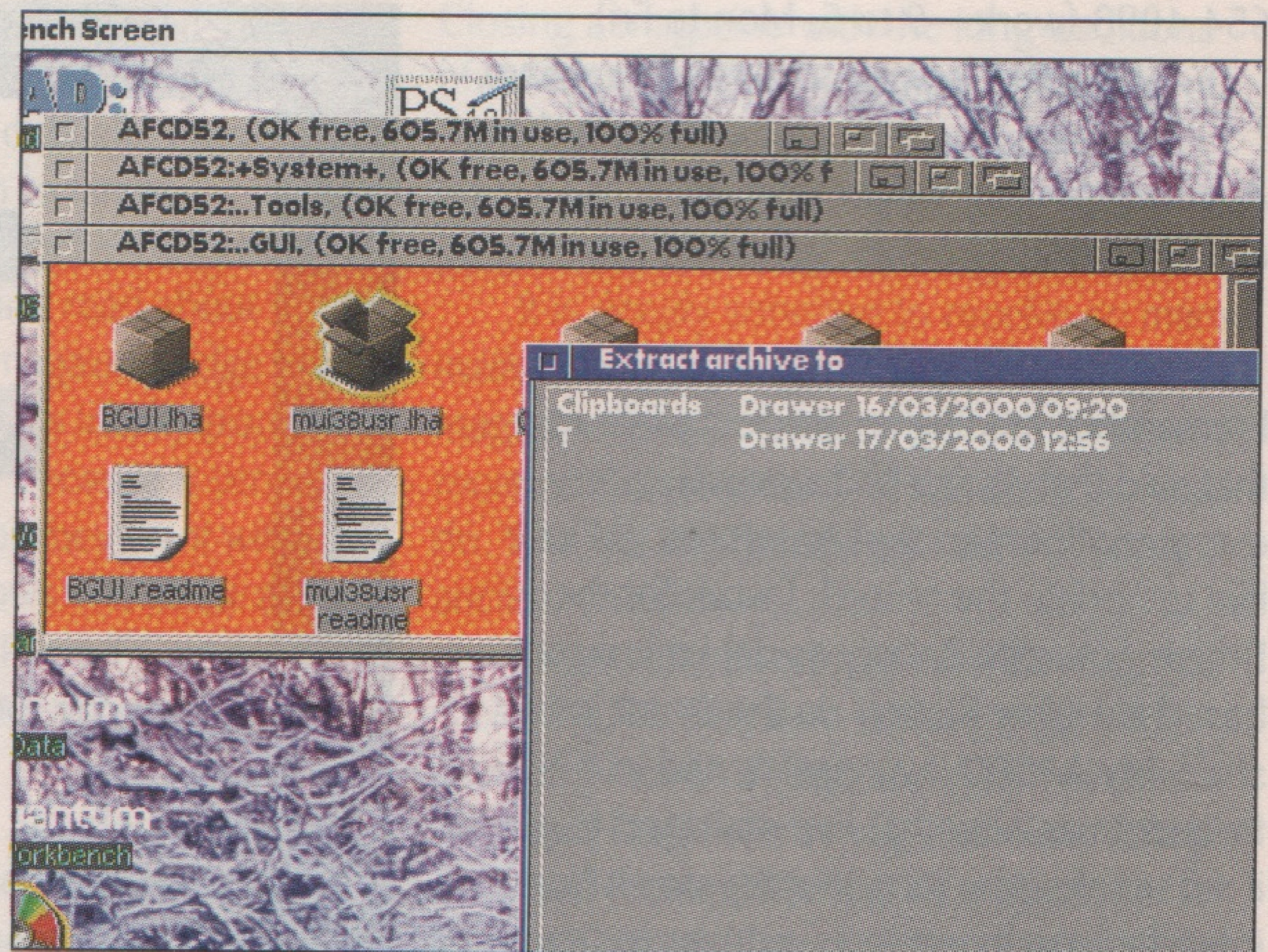
On double-clicking the icon MUI138.lha in the GUI drawer, I obtained the file requester and selected WORK (I also tried leaving it as RAM disk). Clicking on the button EXTRACT produces a blank window with a PROMPT in the left-hand top corner. This window presumably should show the extraction taking place but nothing happens. Trying to deal with *ClassAct* produces the same result.

I explained this to the person on your help line but he was at a loss for an explanation. He suggested and gave me a list of entries to put in my shell but perhaps due to my disability, I obviously did not get them down correctly and they didn't work.

Incidentally, I am very much a beginner when it comes to AmigaDos and the Shell and at the age of 80, I am unlikely to spend much time improving. However, if no other solution is forthcoming, I am quite capable of following instructions regarding entries onto the shell.

With thanks for your co-operation,

Brain Haslam, Carlisle



Upgrading your version of LhA should sort out Y2K problems.

The problem is solely that the version of LhA on CDs up to AFCD50 was not "Y2K-compliant". Replace it with the version that can be found on AFCD51, or AFCD52 and all will be well.

URBAN UPSTART

Dear Sir,
Using the ZXAM emulator on my Amiga, I have finally completed *Urban Upstart*. The last attempt took me 33 minutes. Am I the first to do so? Do I get a prize? – it took me several attempts.

Do you remember *Urban Upstart*?

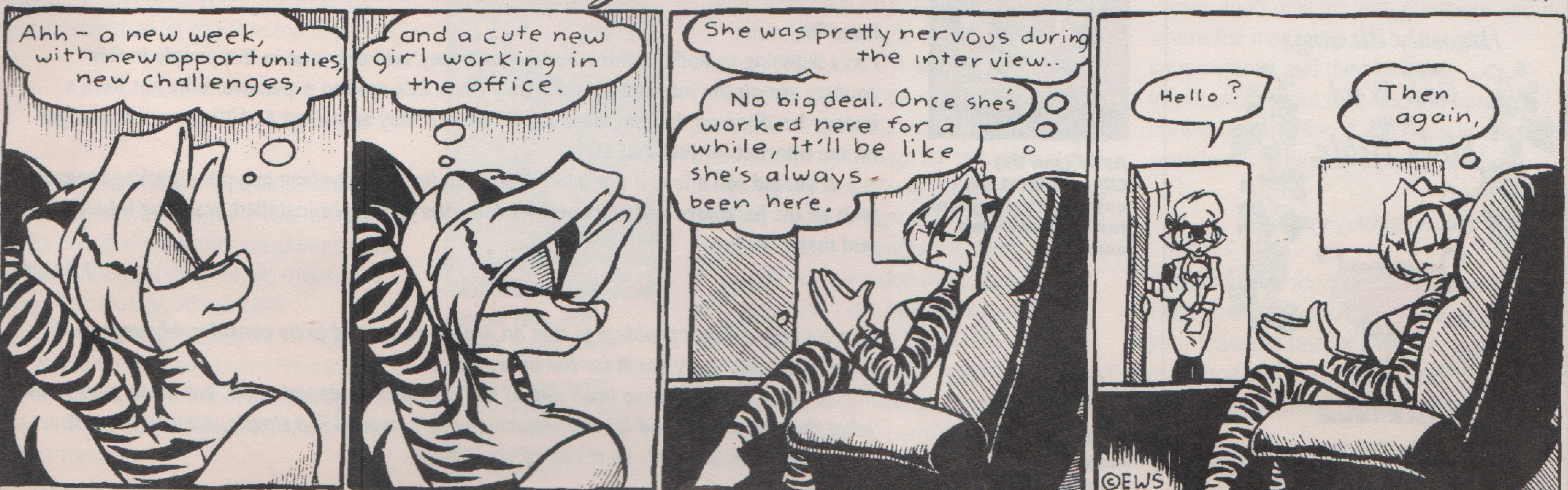
Shaun Morris, Walsall

Umm, no... on all three accounts.

KICK OFF 2

Dear Sir,
Does anyone play *Kick Off 2* any more? We have been addicted to this game for nine years and we believe we are the best players in the world. We are looking for challengers to our crown who could join us in a tournament we are hoping to set up. If you're interested, get in touch. Ring 0121

Continued overleaf ➡



Check out Sabrina Online at http://www.coax.net/people/erics/

654 4093 (work – 9 to 5, Mon to Fri).

Charlie Cooke and Adam Markham, Birmingham

Anybody fancy goin' 'ome in an ambulance?

END OF THE WORLD?

I remember reading an article a while ago that said that Amiga had a presence in every continent except Antarctica. I'd just like to update the record: I work for the British Antarctic Survey as data manager, based at Halley Station on the Brunt ice shelf. My A1200 is alongside and in frequent use now that I've managed to get it set up after the long journey down here. I intend to use it mainly as a driver for my digicam, but I'll be maintaining some things I've written too.

Since I'm fairly remote down here, I've not had any Amiga-related news since last October and I don't have any copies of *AF* with me, only half a dozen cover CDs.

Could you tell me if there's some kind of regular newsletter? I seem to recall *AF* set one up a while ago but I don't have the address. Thanks.

Jamie Keir.
http://www.jameswatt.ac.uk/jkeir/index.html

Yes, there's the afb mailing list which you can get to at *http://www.egroups.com/group/afb/* *It'll carry on for long after AF has gone...*

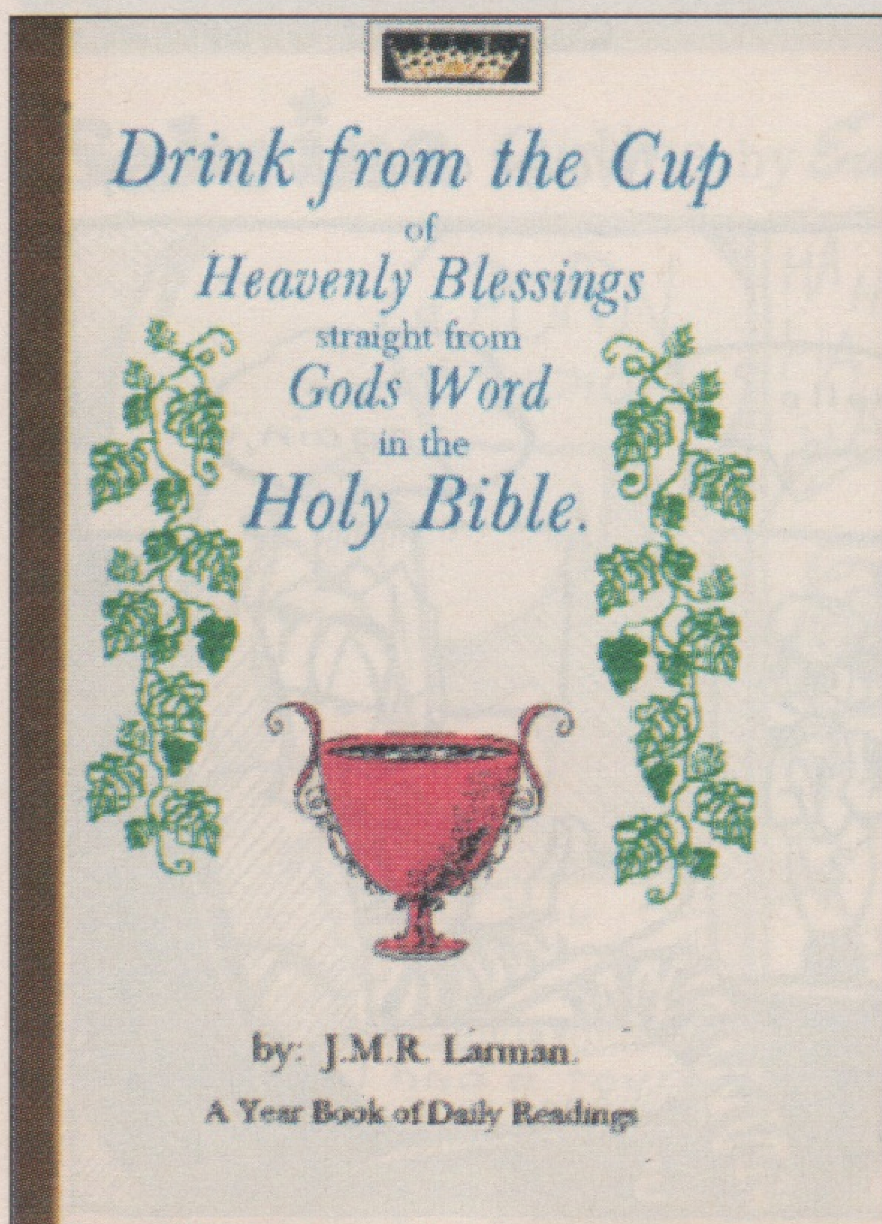
USEFUL AMIGA

Your mailbag page is asking about Amigas in use…

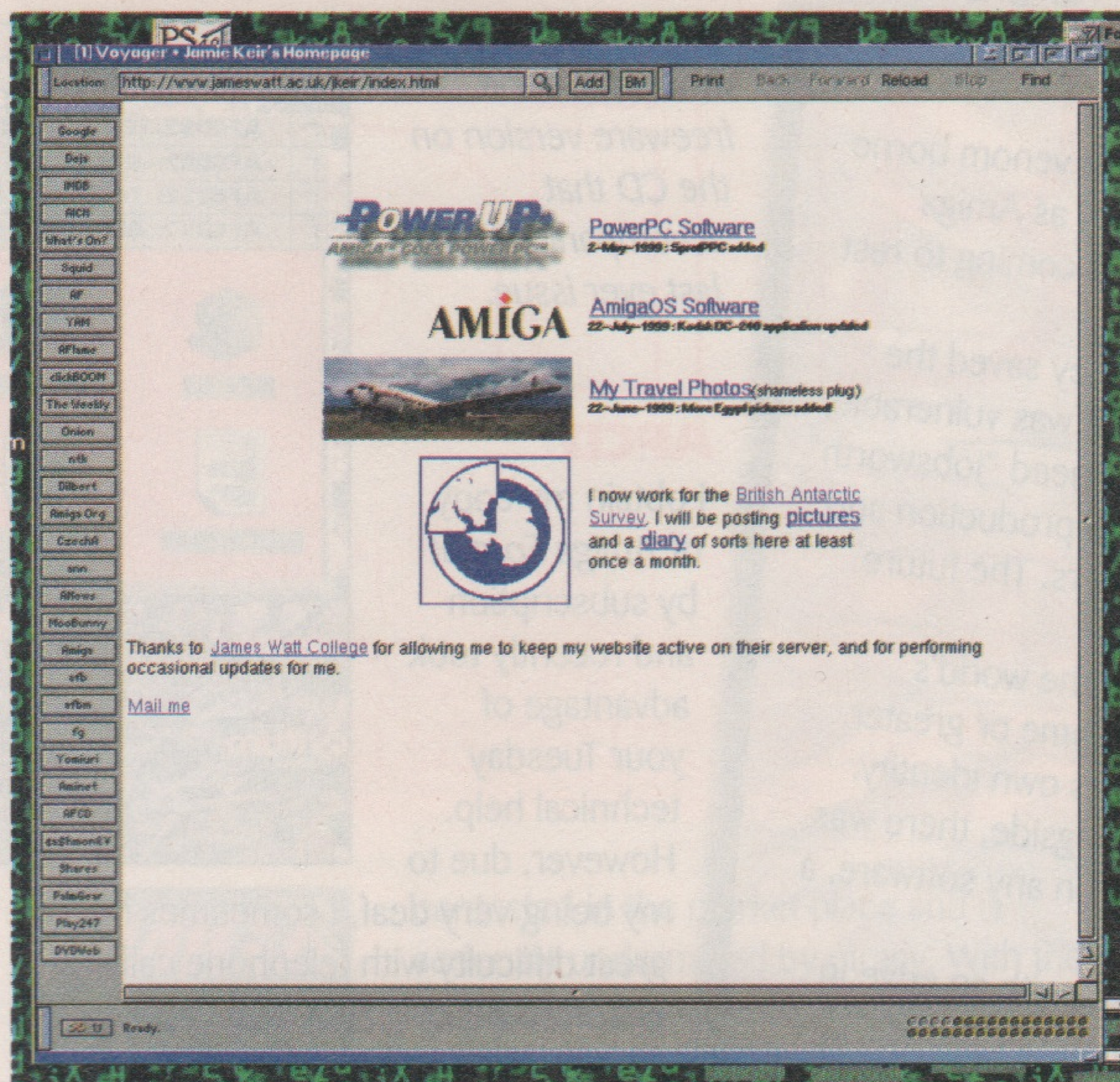
I am using mine to publish my own books. The latest one is *Drink from the Cup*. Please find a picture of the front cover that I did on my Amiga A1200. I used *Wordworth* for the book itself; it is an excellent program. I mainly use *Deluxe Paint* and *Personal Paint*.

Jessie Larman, Australia

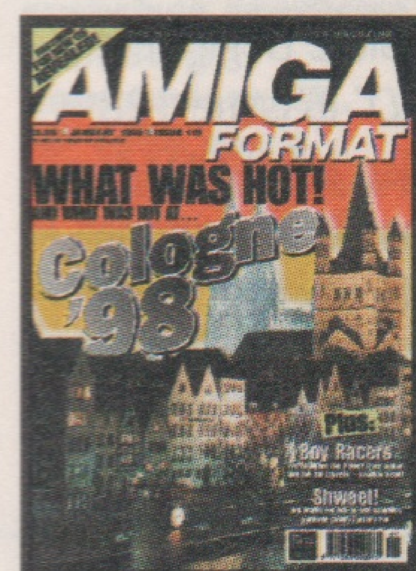
It's nice to see Amiga owners showing off the skills their computer endows them with. Of course, you might want to use it for larger formats than your book, so you may need better programs in the future. I can recommend PageStream 4 for book-style layout as its chapter system and indexing are invaluable for longer documents.



Jessie Larman's Amiga-created book cover.



Those Amigas get everywhere, don't they?



AF119 (Jan 99) – In a shocking move at the K'ln 98 show, Amiga put Dan Dodge, president of QSSL on the stage to demonstrate the new partner OS for the Amiga - QNX - to slack-jawed attendees.



AF67 (Jan 95) – CEI and CBM UK enter a bidding war for Commodore's assets.

PICK AND PILE

Dear AF,

I bought an Amiga (2M, Workbench 2.04 - I think). With it was a game called *Pick and Pile*, made in 1990 by Ubisoft. The wife and I have a great laugh playing it but there are no instructions with it. I don't see a readme file either.

Can you help with any info please?

We hope the new owners have a big success with the Amiga.

Amiga Format is very good for info.

All the best.

Jim Clark, Glasgow

Can anyone help Jim with his request? We certainly can't.

THE END IS NIGH

It is a very sad day indeed when *Amiga Format* is forced to close. Especially as it now looks like maybe, just maybe, we may yet see a return of our favourite computer. But what prompted the closure? Well obviously lack of profitability, of course… but why?

Well, if you look at the recent issues of *Amiga Format* you would have no doubt noticed the lack of Amiga companies advertising in *Amiga Format*. The reason for this is manyfold, but mainly it's either because the dealers feel that they are not getting a high enough response from the advertising – in other words, they feel they are not getting their money's worth – or as is the real case, they are not making enough money.

The dealers have nothing much to sell. Many of you will not know that there was hundreds of thousands of pounds on back orders for phase 5 products. Sadly phase 5 got it hopelessly wrong and went under. Add to that the low number of software releases and you can see why they aren't making any money. But it's not just the dealers' fault, nor is it the software developers' fault – after all they can't always write the odd classic game or wonderful application.

"Ah! Then it must be the users' fault, surely?" Well, partially. When *WipEout 2097* was released it was widely acclaimed as a hit by everyone concerned. To date the number of copies sold is not really deserving of such a wonderful title.

"But I am not a charity." True, we all love our Amigas – the mere fact that you are reading this magazine (for the last time) attests to this – but bear this in mind, if you want the Amiga to survive, it's no longer about yourself, It's about the community.

Support a dealer, there will be demand for more products. (Despite what they may tell you software dealers, regardless of who they are, aren't selling much and some are barely keeping their heads above water.) However, the products have to be of good quality to gain the buying public's cash – too many titles have been released recently that are really a pile of poo!

Amiga Format was a shop window to many dealers, however they stopped advertising in *AF* because we aren't buying anything. Thus magazines like *Format* fold because a large amount of their income is reliant on advertising. It's a vicious circle; I'm not sure where it starts and where it ends. Piracy, I'm sure, is also to blame.

One thing I am sure of, though: unless we all do more, we shall all be doing our bits and bobs and some other system. Magazines are the glue that holds the whole

COVER LINES

Dear Sir,

I was listening to Radio 5 the other day and they said only one in five people in this country are on the Internet because they think PCs are too expensive. Why not have a banner headline on the magazine's front cover: "Buy an Amiga A1200 computer and get on the Internet for just £££s!"?

It should sell a few, if not a lot. Perhaps a firm like Eyetech can put a package together with all the hardware and software needed, everything pre-installed, just plug into a TV and mains socket!

J Rogers

There's only a slight problem in that an Amiga does need to be considerably upgraded before you can really use it for the Internet.

It's true that folk have been online with a floppy-equipped 1200, but these guys know what they are doing, and for the majority, what's needed is a simple, easy way to get online. This might not be as cheap as you'd think.

AUSTRALIA SPEAKING

Hello Ben,

Imagine my surprise when I read the mail today. I've been out of touch (with afb) for a few days, and then I find disaster struck, with a mass of awful email all about it.

I've been buying *Amiga Format* ever since 1993, when I first found one in the newsagent. I'd never even thought of looking for an Amiga magazine, and just saw it by accident. Since then I've bought every issue they'd put on the shelf (and I've run out of shelf space to store them).

I think I've only missed a few issues that never made it over here to my newsagent (in Australia), and they've always seemed to be the ones I really would least like to have missed (going by what was in the following issue).

I suppose it was always on the cards. It's hard to produce a magazine for what's supposed to be leading edge technologies (computers), when ours isn't, and would seem to be abandoned by the manufacturers.

Though, that doesn't stop the production of magazines for other hobbies that are hardly mass market driven (classic cars, electronics, amateur radio, etc.). It's a shame there wasn't some way to keep going, even if it wasn't a monthly issue.

It's probably a forseeable future for other printed media, with the recent explosion of the internet. Even computer shops are falling by the wayside. Now they're becoming just a foot in the door, then you get the rest of your goodies over the net, and spend forever trying to get them to work that way too.

Tim Seifert via afb

Thanks for your support Tim and your worry over printed media strikes a chord – have a look at our Farewell feature for more opinions on the topic.

market. Nope. We have no one to blame, but ourselves. That includes you and me.

Mikey C

Harsh words Mikey, but probably quite true. However, I do think that we've had some great software titles over the past few months, including PageStream 4, ScanQuix, Heretic II and many others besides.

BEST WISHES

Dear Sir,

I am sorry to see the mag shrinking in size but you all do a good job, so keep it up!

You never know, you may be able to increase the size of the magazine once more when things improve, as we hope they will.

Steve Bubb, Helston

Thanks Steve, but as you'll see from this issue, it might all be too little too late. Sorry.

DAG NABBIT... ANOTHER ONE BITES THE DUST

Amiga Format and the long since deceased *CU Amiga* where always my two favourite Amiga oriented computer magazines (and for years I bought most of the magazines – *Amiga Computing, Amiga User International, Amiga Shopper, Amiga World*, the short-lived *Amiga Pro* etc. etc.)

I know: I was a sad Amiga junky at the time, now in re-habilitation for the lack of a regular monthly fix.

I can, therefore, say hand on heart that it'll be sad to see *Amiga Format* close.

As for Amiga themselves... I semi sorta believed in the QNX debacle, I never believed in the switch to Linux.

As for TAO... I have believed in their concept ever since I first read about it in issue 9 of your sister magazine *Edge* way back in June 1994. TAO is ideally placed for the future precisely because it can be moved to any processor they want within a matter of weeks. Windows NT, as far as I know, never made it to PowerPC or Alpha despite all the press that surrounded the darn things at the time.

They couldn't do it. Simple as that. Like I say, TAO is ideally placed and I believe TAO is a forerunner to how all OSes will be designed in future. Those who doubt the concept need to find out more about TAO.

I'm sure I'll see you again in another year or so in charge of the new and improved *Amiga Format*.

In the meantime, bow out gracefully and give *Amigactive* (and whatever other Amiga-oriented magazines there may happen to be out there that I've not heard of) a plug in addition to all those darn PC magazines Future Publishing are inevitably gonna hit us with in the last issue.

Cynical? Me? No way!

Reticuli via afb

Thanks for your kind words Reticuli and yes, you can bet your bottom dollar that if the Amiga market rises to prominence again (and it surely deserves to), then two things will happen. Future will one of the first with a new Amiga magazine and secondly, I'll be at the helm. See you soon!



AF17 (Dec 90) – We cover 24-bit graphics and hard drives in depth for pretty much the first time.



AF104 (Dec 97) – phase 5 and H&P fight over a kernel for the PowerPC while Gateway say they never promised that it would be part of a next-generation Amiga anyway.

FAREWELL OLD FRIEND (AND RIVAL!)

Now that the fuss has subsided a little and the deadline for the latest issue of *Amiga Active* has been and gone, I'd like to add my own voice to the eulogies for the best-known and longest loved Amiga magazine in the business.

Apart from a brief spell after *CU*'s closure, *AF* has been the rival publication for me for the last few years. Generally it has been a very good natured rivalry, and a lot of fun. Now it is no more.

Other magazines may come, but they won't be *AF*. They won't be the established pillar of the market, the magazine against which others will be judged.

No more having to figure out what impact *AF*'s damned 4-weekly schedule will have on scoop timings, no more trumping each other's innovations with the CDs, no more scanning through *AF* to cackle at the things we did better, and curse at the things they did better... I got involved with *Amiga Active* because I thought the Amiga market in the UK really needed more than one magazine, and I still think that is true.

Farewell then, *AF*, you will be missed.

I guess I know pretty well what Ben and Richard are going through, and I'm not just talking about having a pretty good idea of just how large their in-boxes are going to be at the moment.

Closing a magazine with the long traditions of *AF* (or *CU*) makes you very conscious of the history of the title, of the people who have been there before you and all the people who have read the magazine.

It is deeply sobering to receive so many mails from people who have read the magazine for a decade or more and know more about the history of the title than you do. You feel like the last guardian of some ancient tradition.

It's not just Ben and Richard's mag that is closing, it's also Bob Wade's mag, and Damien Noonan's mag, and Asam Ahmad's mag, and Maff Evan's mag, and Nick Veitch's mag, and Richard Montiero's mag, and Marcus Dyson's mag, and the mag of all the other people who have worked on it and the hundreds of thousands of people who have read it over the years. It is a sad thing, the end of an era.

So at the end of the month *Amiga Active* will be in St. Louis to see the new Amiga unveiled, and we'll be there alone. It's a bitter irony.

Ben, enjoy *3D World*. Rich, enjoy *Linux Format*. I'm sure you don't need to be told that I'd love to see you both making appearances in *Amiga Active* when time and contracts permit. You can add me to the long list of people who have promised to buy you a pint at WoA.

AA continues. We will do our best to be a focal point for the Amiga industry, which sure needs it. I've seen a few people talking about asking us to include some of the things that *AF* ran, and I'm not making promises, but I am open to suggestions.

Please keep in mind that there are reasons why *AA* is different to *AF*, and the desire to appeal to the sectors of the market that *AF* didn't is only one of those reasons. We are happy to listen to requests though, and will implement changes if we think that they will be popular amongst a good number of readers.

Please do not flood us with emails detailing which articles/sections from *AF* you would like to see us take on, or telling us to hire Ben and Richard. We will provide a brief survey on our web site to allow people to register their opinions on the common points.

If you have any less obvious suggestions or requests, then feel free to email me on andrew@amigactive.com. Please don't mail me with questions about where the magazine can be bought, subscriptions and the like either – information about that, and the correct contact information if you need to ask a question, can be found on the web site.

Andrew Korn.
Editor, Amiga Active Magazine

Thanks for the kind words Andrew, and may I take this final opportunity to wish you and your team the best of luck with your magazine and also in your dealings with the furore that the new Amiga will cause.

Ben Vost

The Gallery

On the CD -ReaderStuff-/-Gallery-

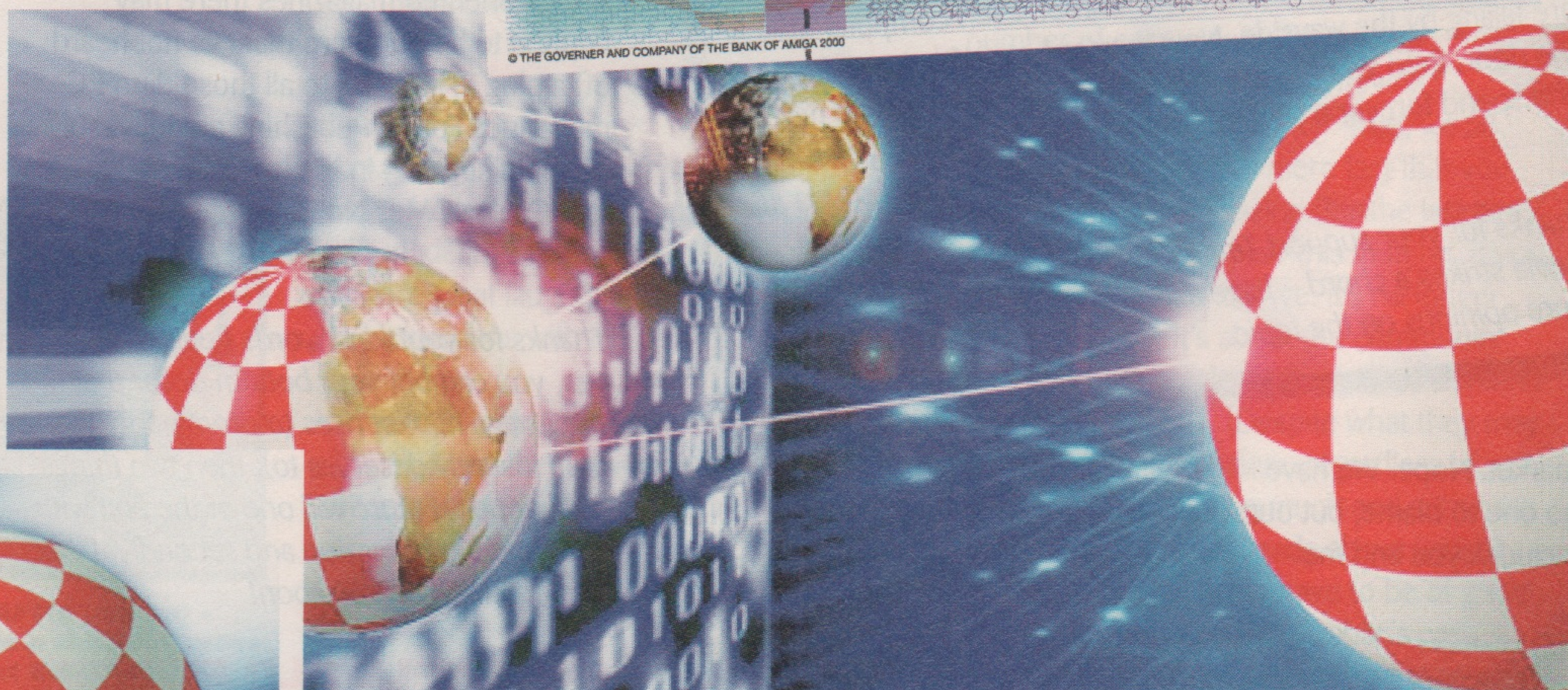
Our final portfolio of prize-winning pictures (and otherwise) is laid before your eyes...

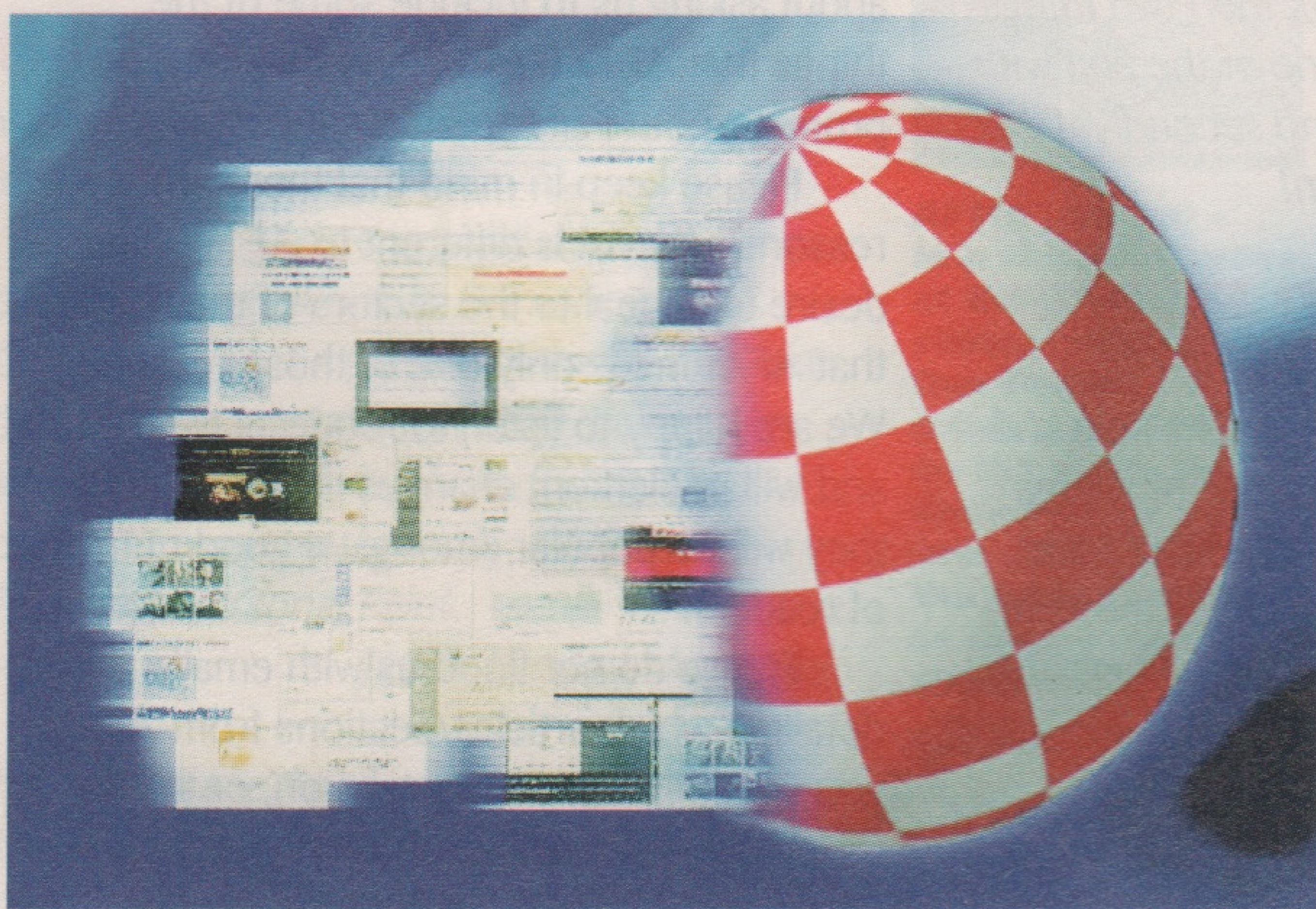


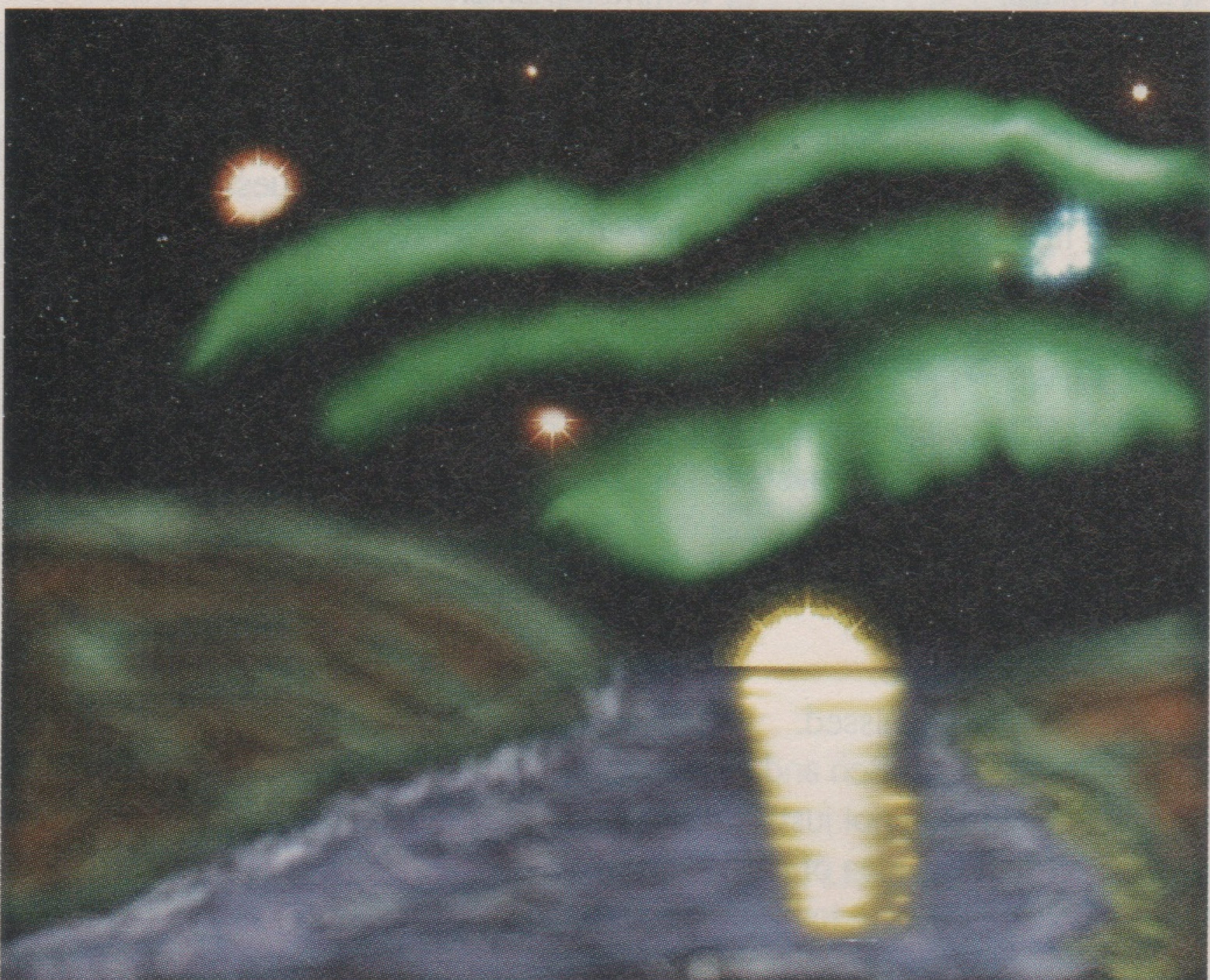
£50 WINNER!

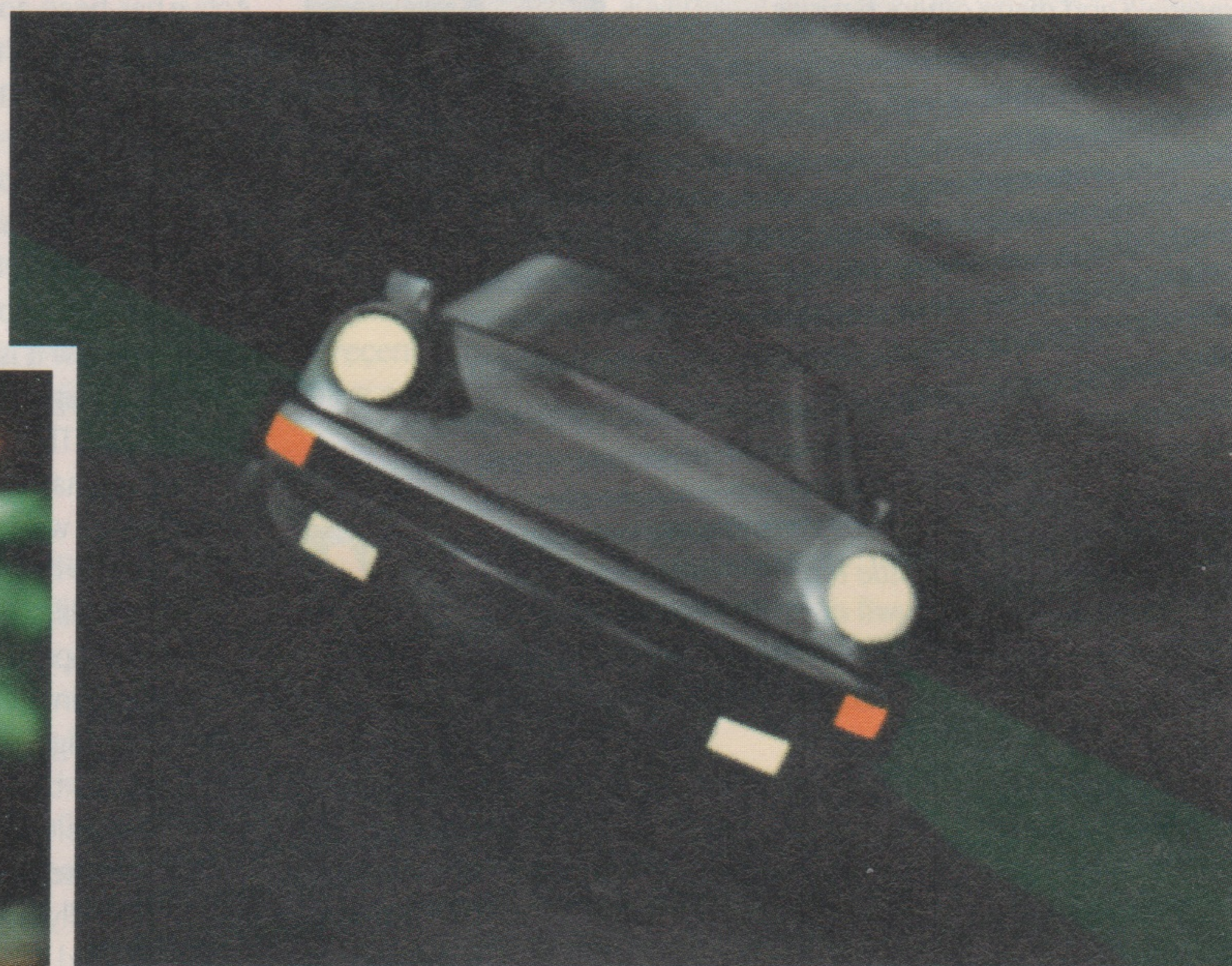
AmigaScreens and AmigaWorld by Richard Blair

Richard's very professional-looking images have been created in a mixture of ImageFX, PPaint and Candy Factory, using all the various properties of each package, including creating layers and lens flares in ImageFX and glows and drop shadows in Candy Factory Pro. Well done, Richard! Have fifty quid on us...









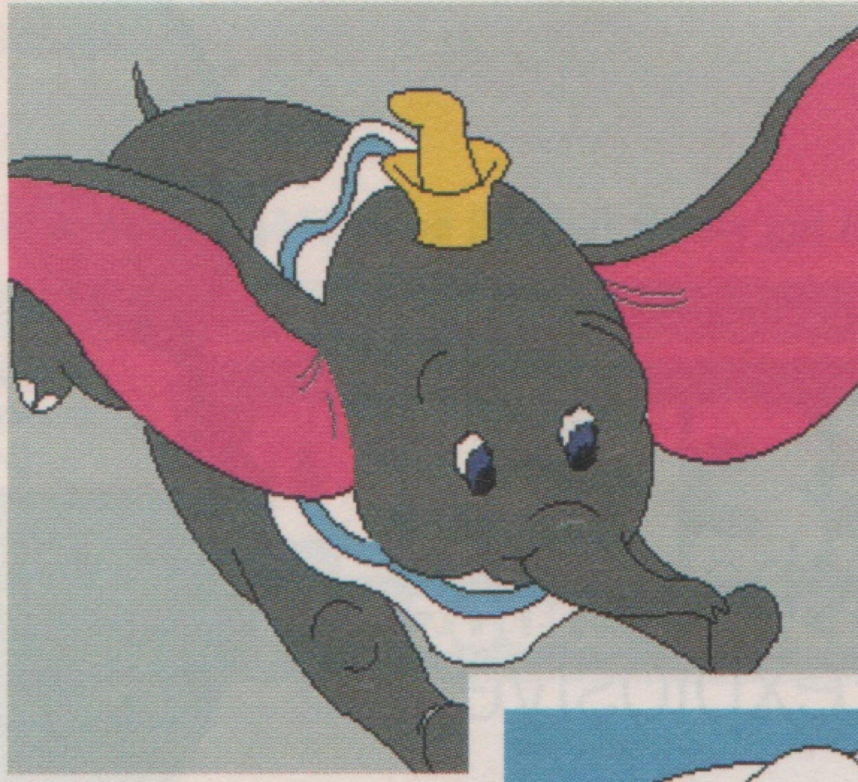
Australis and Porsched060 by Colin Meggitt

Australis is Colin's first experiment with Photogenics and, considering its painterly feel, wasn't made with a graphics tablet (Colin is getting one), but with a mouse. Porsched060 is a Lightwave render that suffers from the usual complaint – it's too dark.

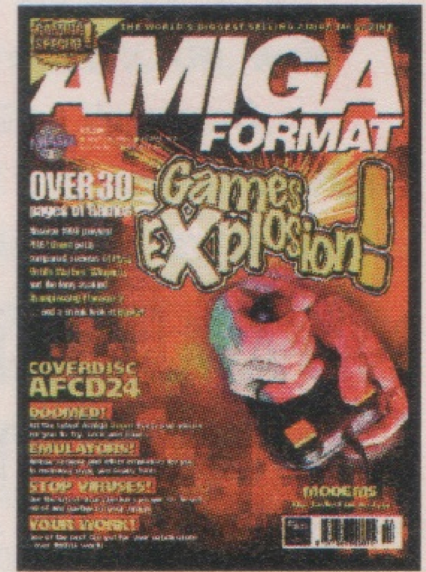


Bambi, Donald Duck, Dumbo, Flounder, Goofy, Gus, Jack by Phil Ellis

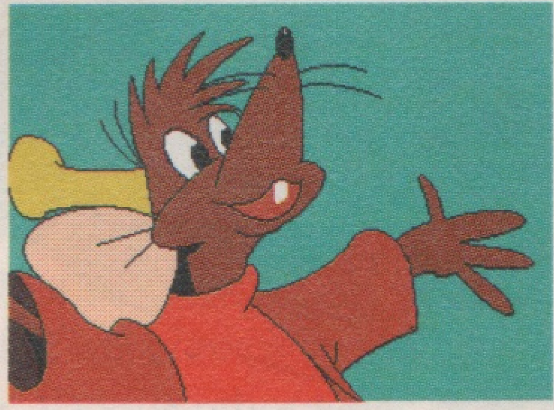
Phil hand-drew these Disney characters to amuse his kids in the days before he had a graphics card.

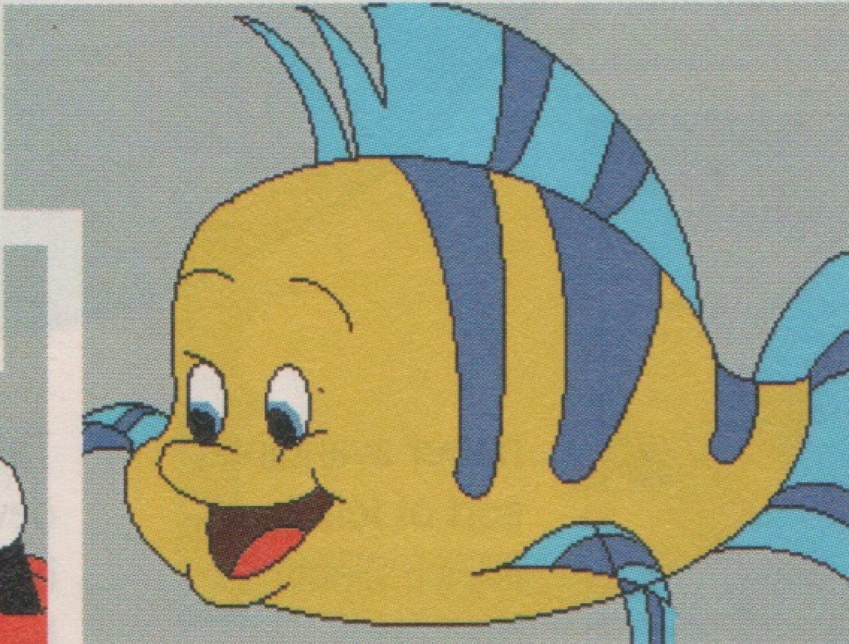


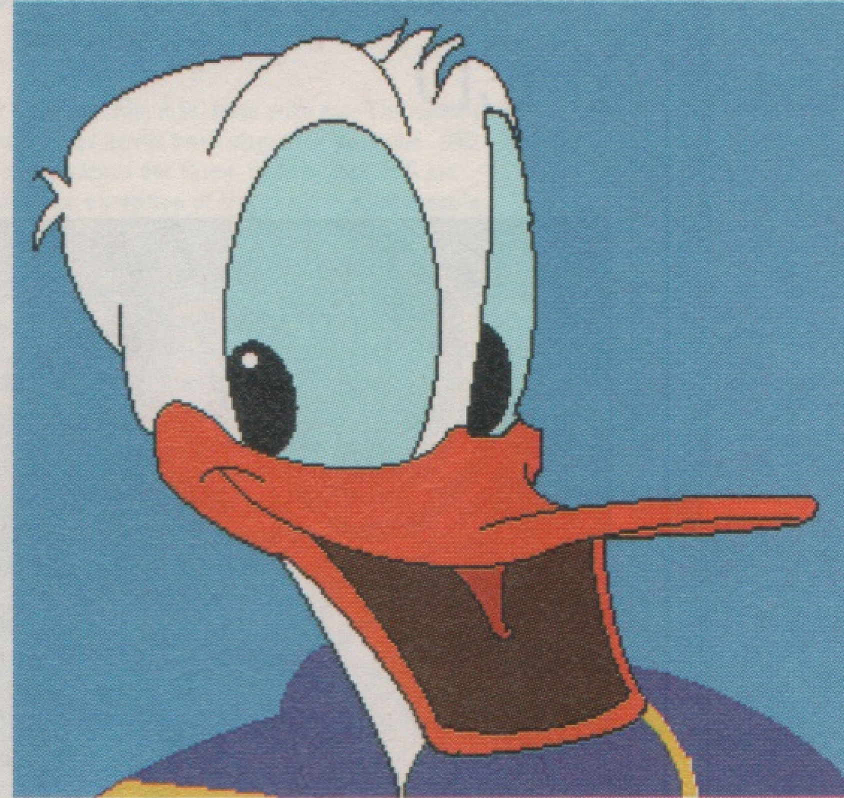


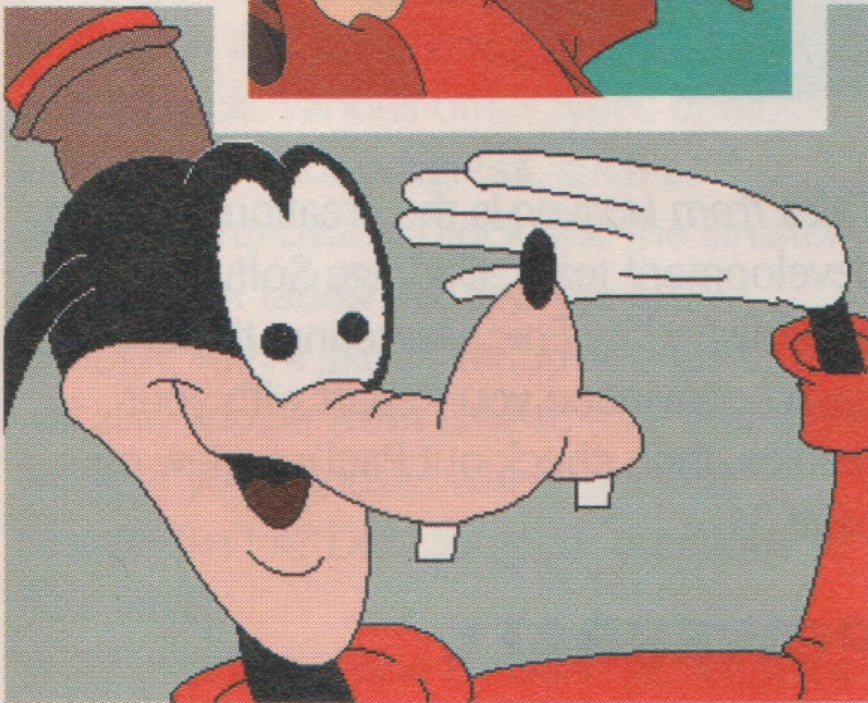


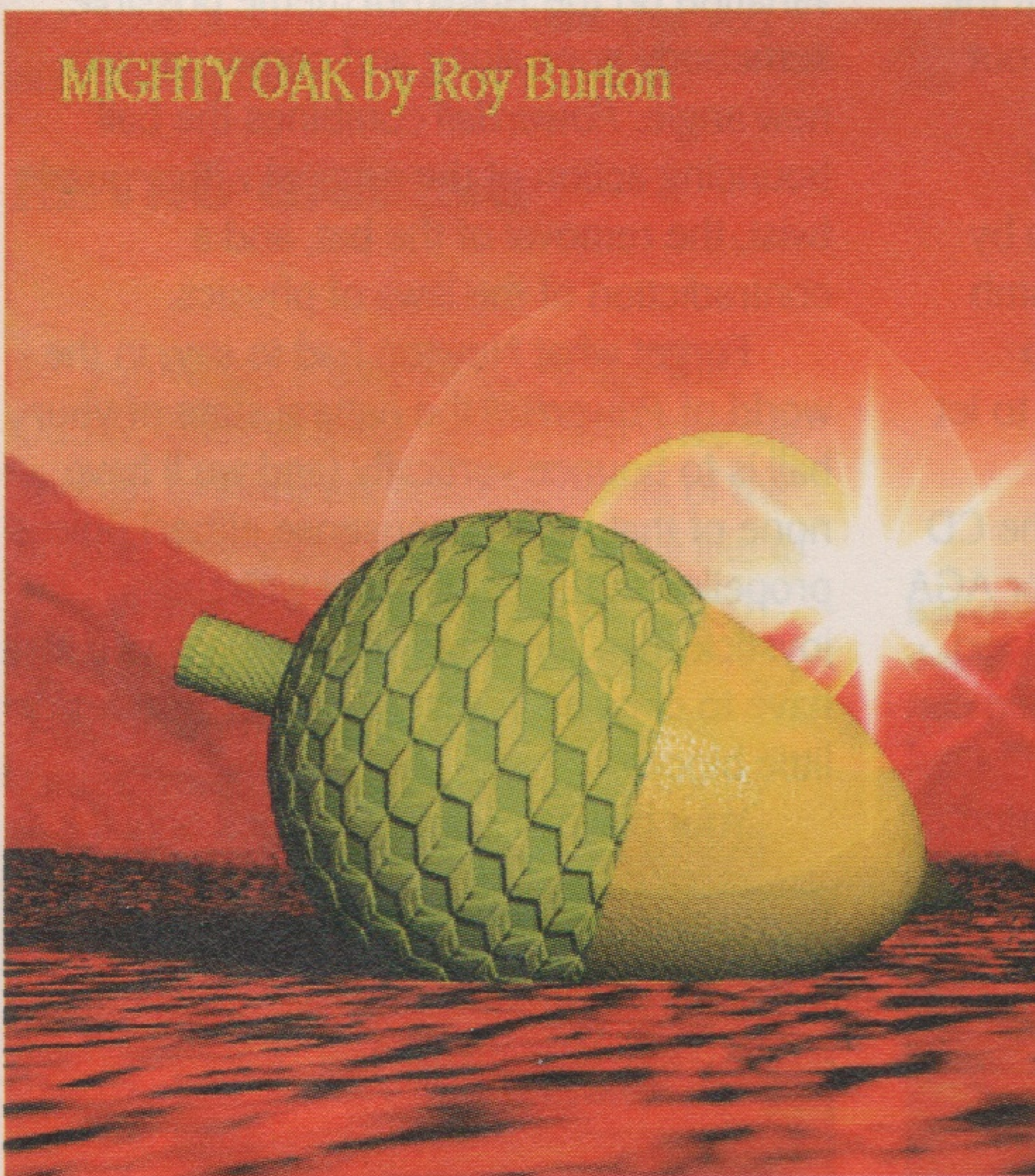
AF108 (Mar 98) – Amiga Inc. deny that they'll be making new Amigas, preferring to license the technology out. The BlizzardPPC cards finally go into production. Doom source is made freely available and the first ports are in.

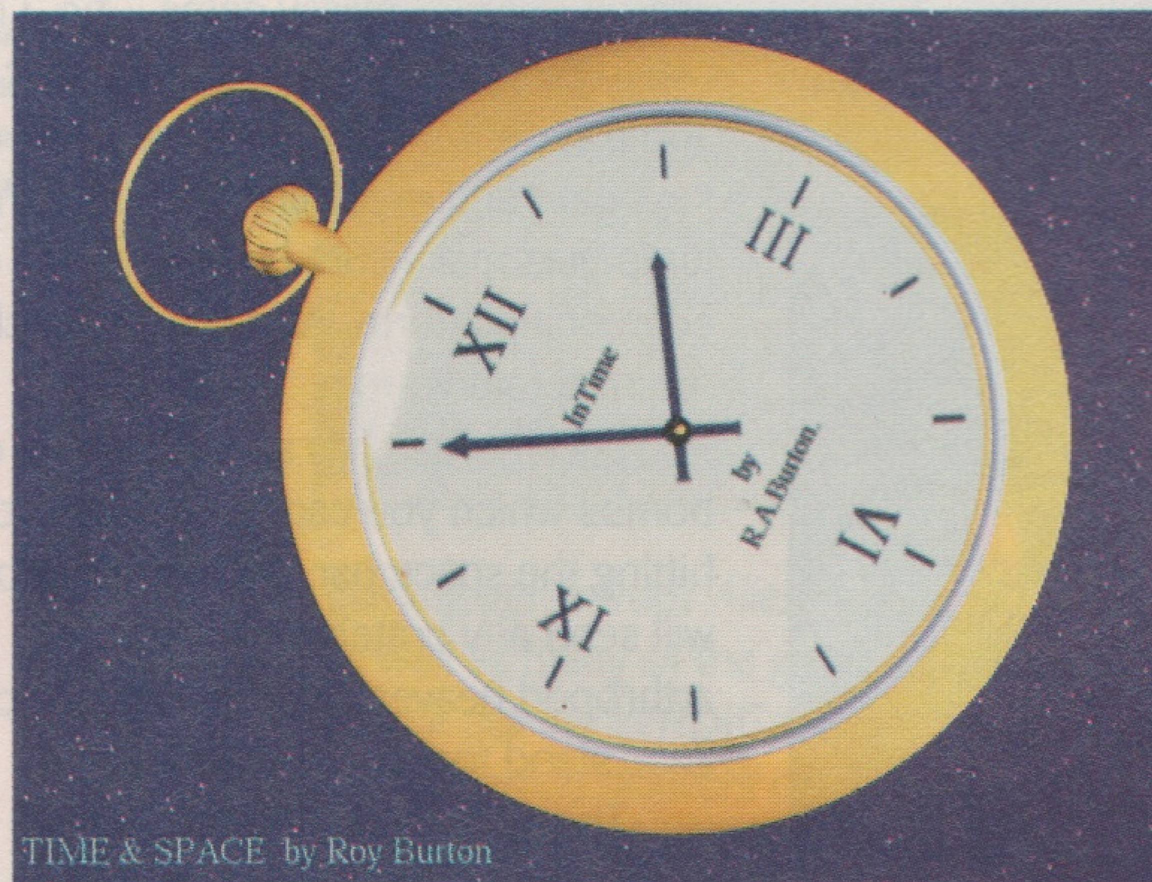


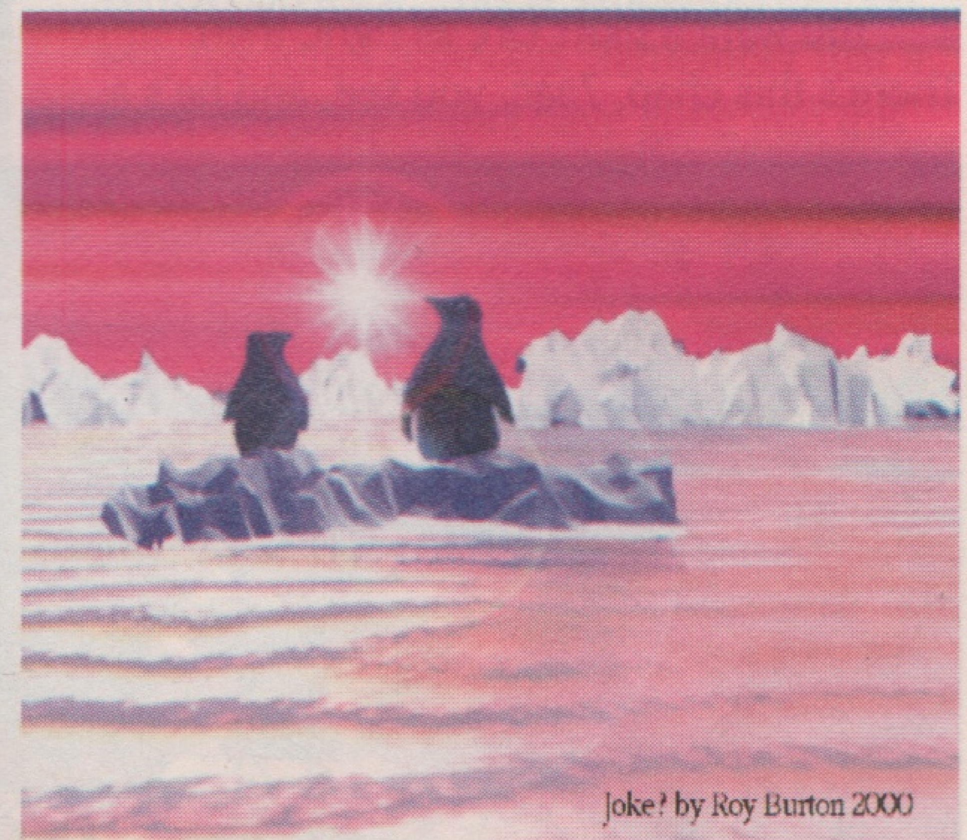








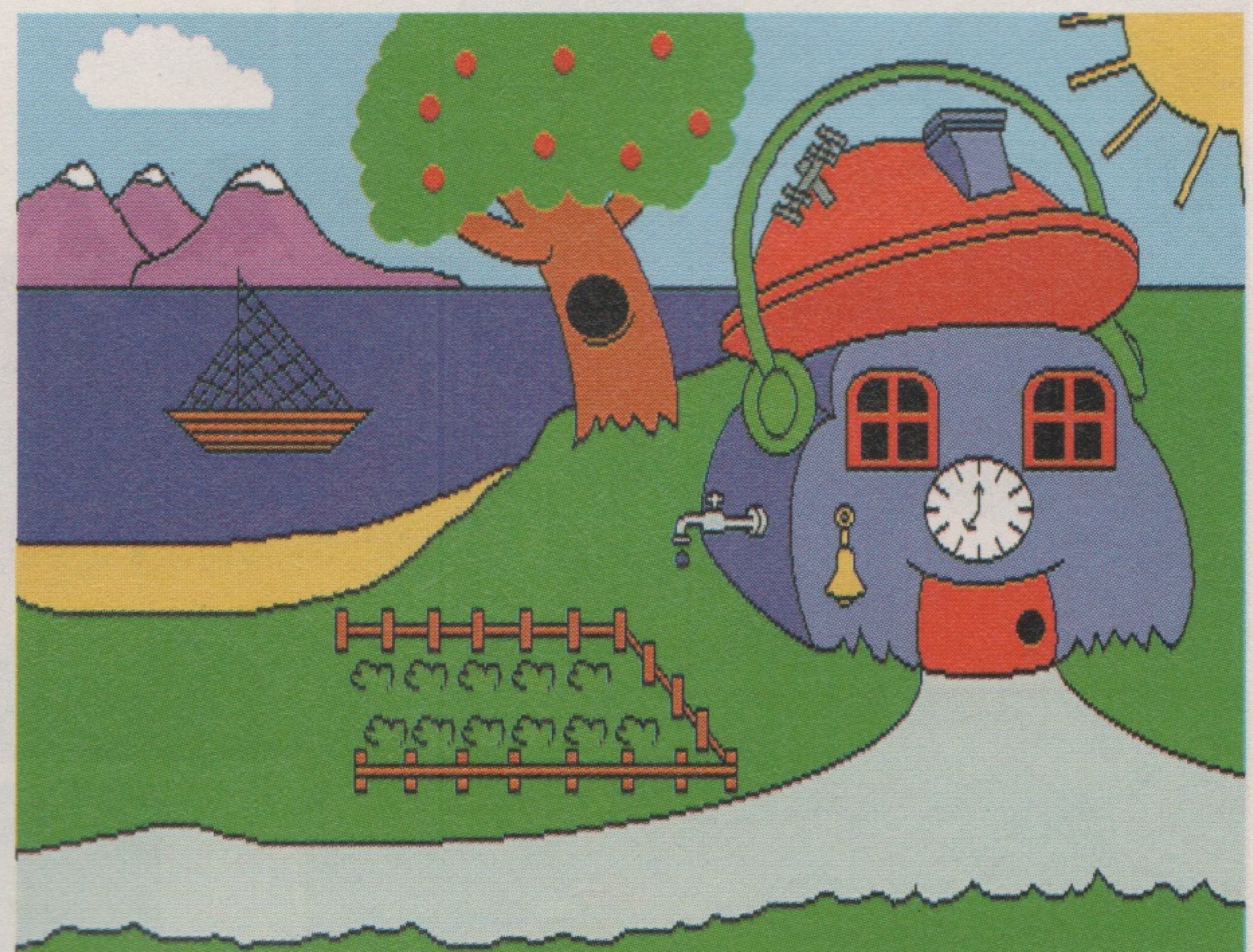




Mighty-Oak, Time & Space and Joke by Roy Burton

Roy's Mighty Oak picture looks a bit like his winning Easter Egg entry last issue to me, but his description and detailed modelling make the Time & Space entry worthy. And his joke (?) picture is very nice, even if the added captions (in the readme) are a bit poor... (just kidding).

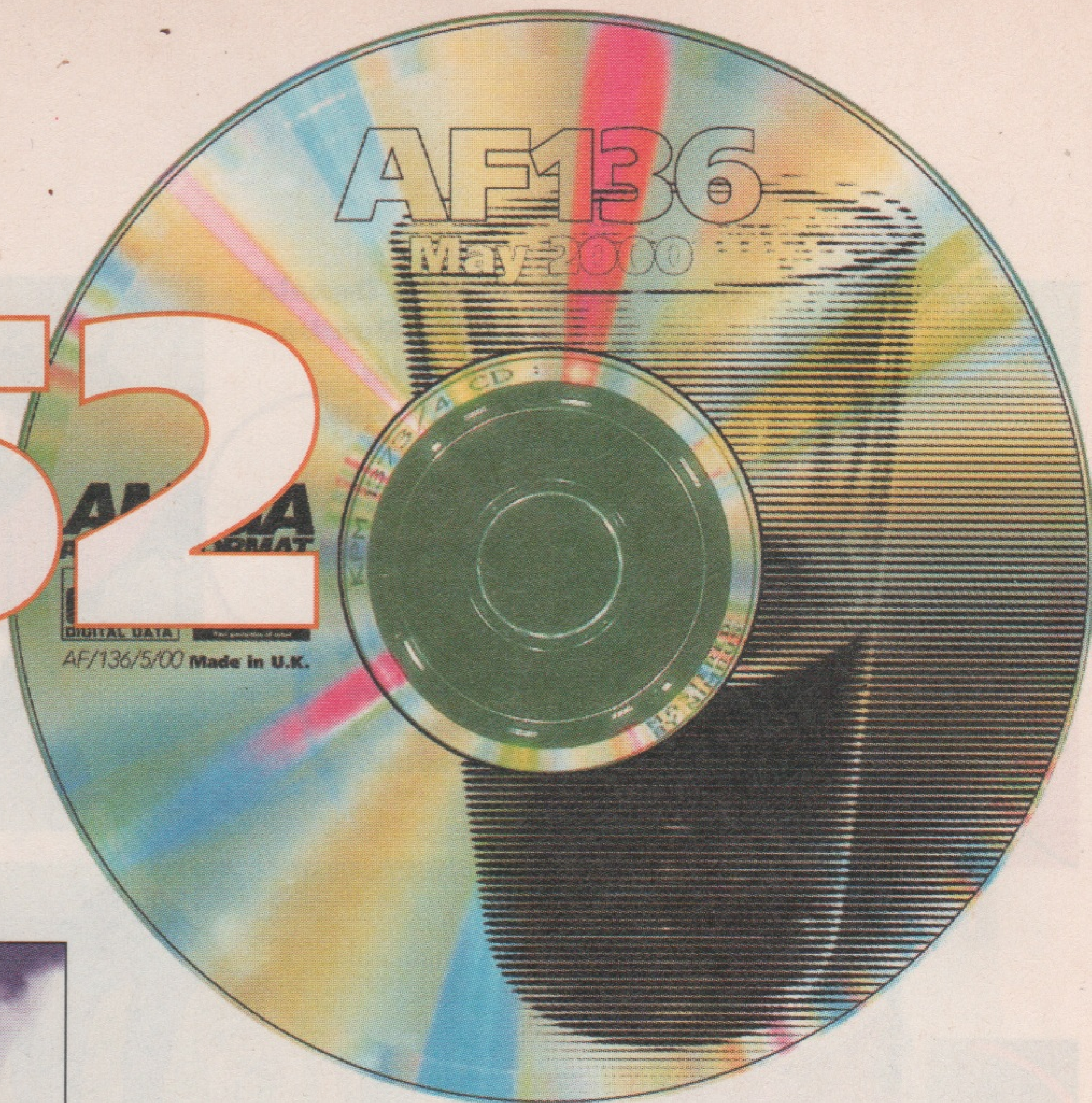




SquidgyHouse and SunsetLandscape by Paul Cundle

Another first-time contributor to the Gallery, Paul sent in a bunch of pics. We liked these two best off all, even though Paul admits that they were both copied from other photographs.

AFCD 52



Now that it's safe to do so, Richard Drummond recounts the full explosive history of the famous AFCD

HEAD IN THE CLOUDS

-Screenplay-/-Commercial-/TfH_DemoAGA
-Screenplay-/-Commercial-/TfH_DemoCGX

They said it couldn't be done but they were wrong. Here it is, the first 3D platform game for the Amiga: *Tales from Heaven*. And it runs quite comfortably on an 030 machine. But you can see all this for yourself by trying out the playable demo of the first stage of the game that we've so thoughtfully included on this coverdisc.

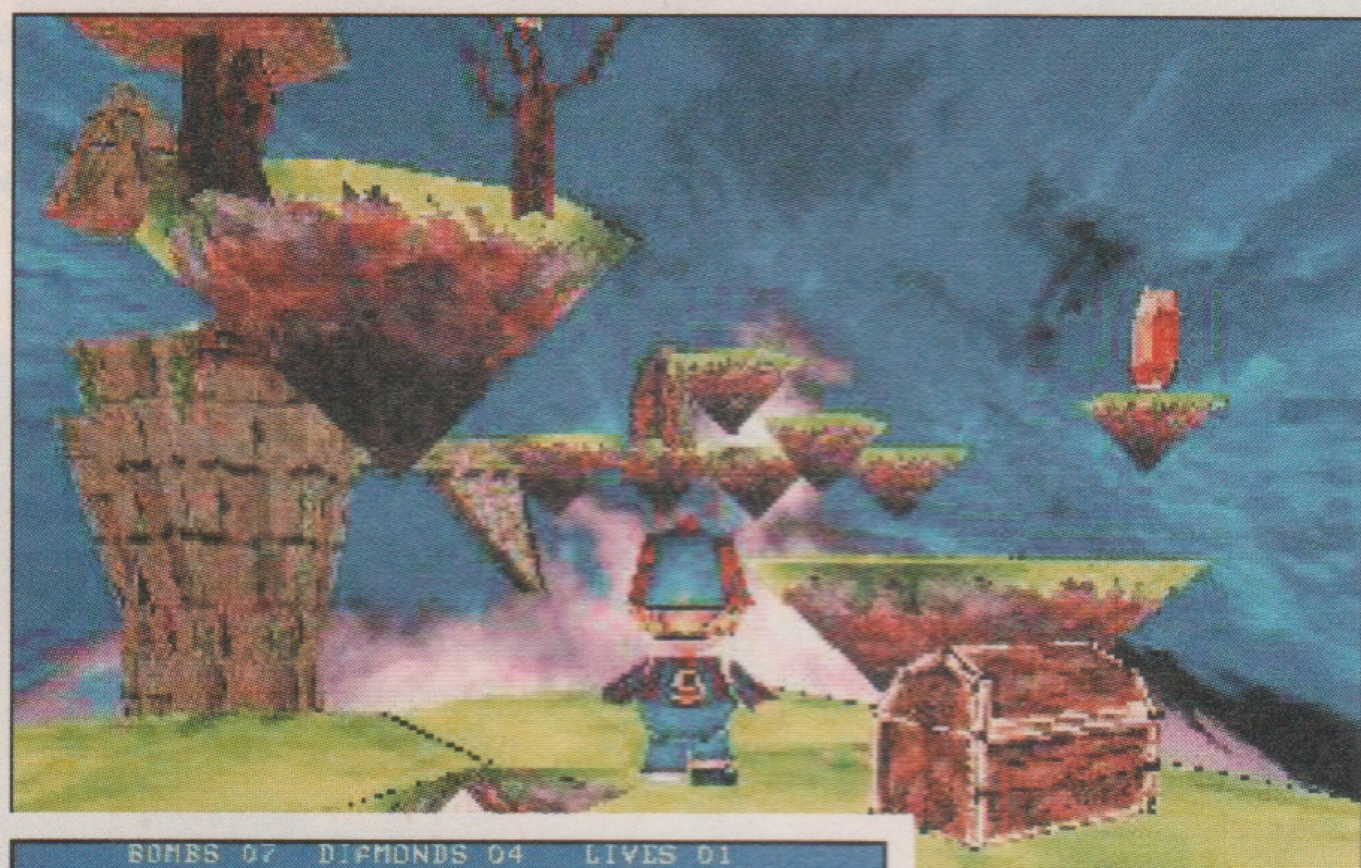
You want a plot? Oh, all right, then. There's this chap, Zaac, you see, and he's a rather avaricious sort of fellow: he likes collecting diamonds. Somehow, his lust for loot has led him to the clouds in search of those glassy gems – no, I'm not making this up – and he needs your help. You control Zaac with a joystick or the keyboard and press fire or shift to make him jump. Just make sure he doesn't fall off the edge of a platform. And keep a watch out for insectoid vermin.

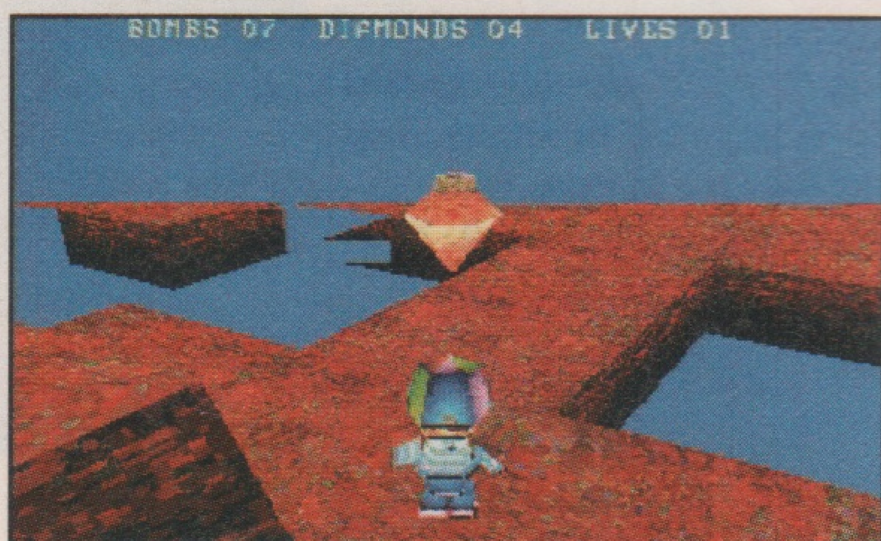


Our diamond-collecting hero in Tales from Heaven, Zaac.

Luckily Zaac has a small supply of bombs which you can get him to drop by hitting the space bar. An exploding bomb will send any critter skulking nearby to arthropod heaven, but remember not to let Zaac stand too close himself.

This game will run straight from the CD and is supplied in two versions, one for AGA machines and one for machines equipped with a graphics card. The options screen can be accessed via the Escape key and will allow you to change the screen resolution or turn off the backdrop if the game runs too slowly on your set up.





(Above) And he's buying a stairway to heaven.

(Left) Following the red-brick road.





3D platform action in Darkage's Tale from Heaven.





Tales from Heaven is the creation of Italian development team, Darkage Software, and is published by Epic Marketing. If this demo hasn't convinced you to part with your readies, then check out Paul's review on page 31.

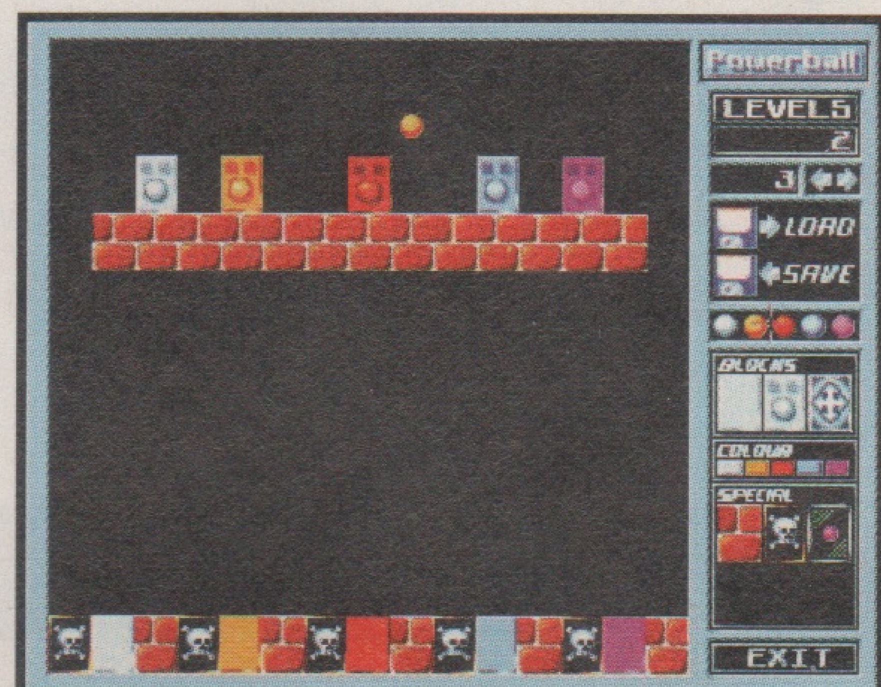
POWERBALL

-ScreenPlay-/-Commercial-/Powerball

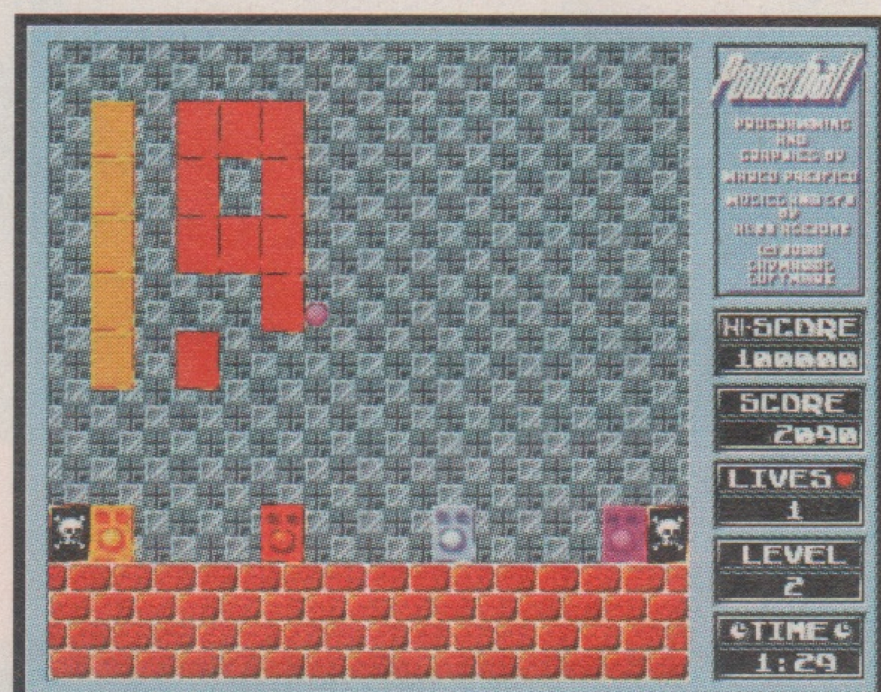
Just when you thought you had seen every variation on the *Breakout* theme possible, somebody goes along and comes up with new angle. *PowerBall* combines the ball bouncing action of the original with a puzzle twist, the removal of the bat, and a contradiction of the laws of physics.

Forget what Newton had to say; in the world of *PowerBall* the natural state of your ball is to bounce vertically (and we'll have none of that friction nonsense either) unless propelled to the left or right with the joystick. The aim is familiar, though: you just have to clear each screen of all those pesky little blocks.

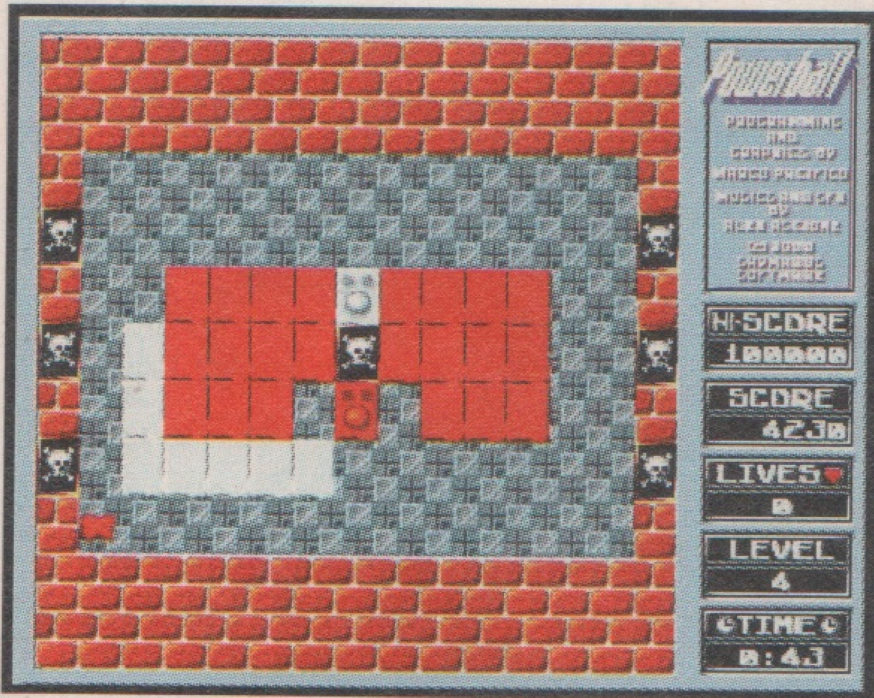
Your ball can remove a block only if it's



PowerBall has a level editor for when you're bored of the supplied levels.



Your ball has to be the same colour as the bricks to be able to clear them.

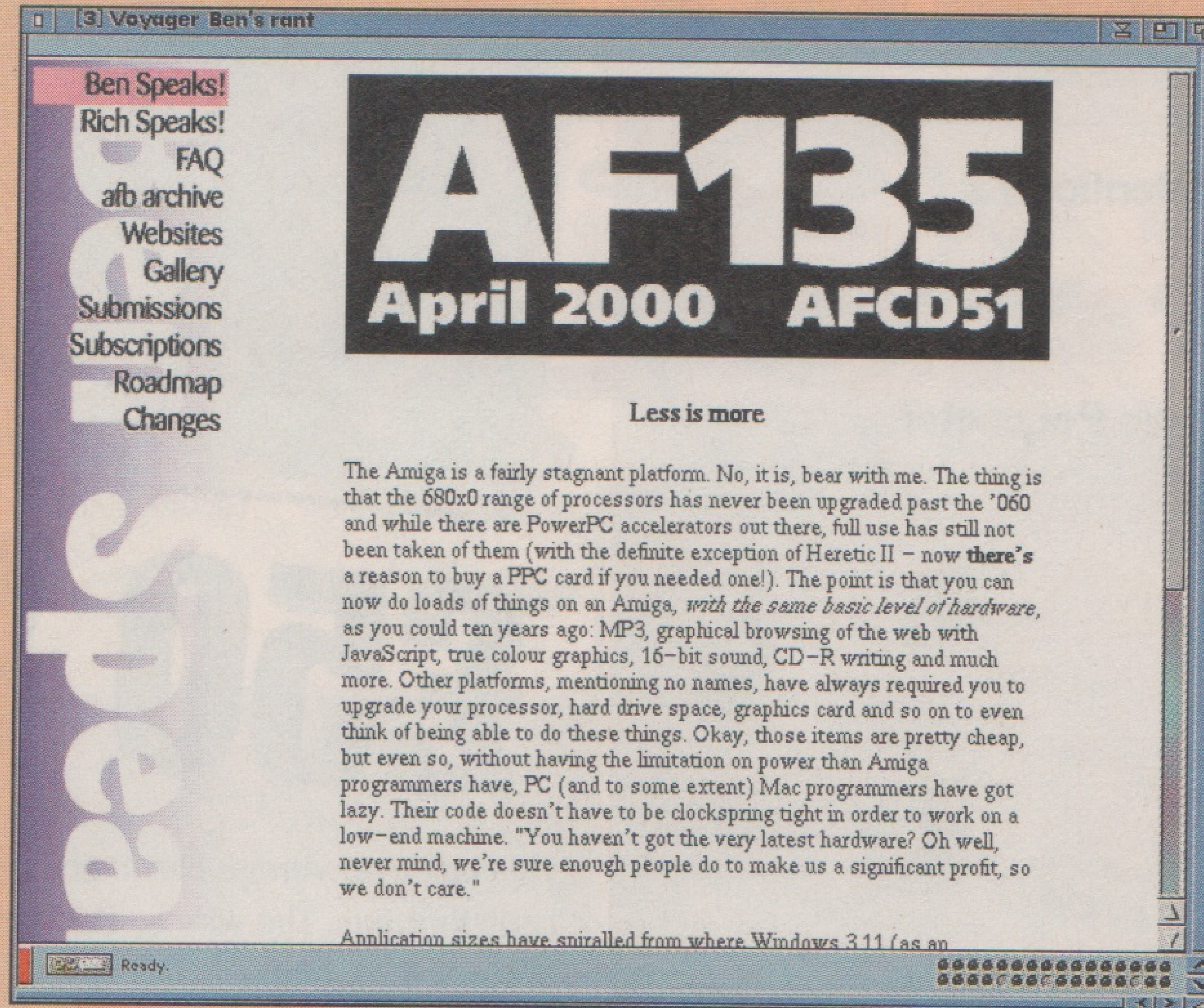

Watch out for those nasty skulls...

the same colour as the block. Fortunately, your ball has chameleon-like properties: if it bounces into a block with two crossed arrows on it, it will change its colour to that of the block. Various other types of block will hamper your progress, such as the dreaded immovable block and the sinister death block (adorned, appropriately enough, with a skull). Various bonus blocks will also appear from time to time and these will give you bonuses when touched. Simple, isn't it? Did I forget to mention the time limit?

PowerBall is also by Darkage Software and published by Epic. It boasts modest system requirements and will, in fact, run on any A500. It should be available for purchase around about the time that you are reading this.

WHAT'S NEW

Typical. It's the last ever *AFCD* and Ben has finally got the HTML pages on the CD functioning to his liking on all three Amiga web browsers. Oh, well.



Your last chance to read Ben speaks... Make the most of it.

If you using either Voyager3, iBrowse2 or AWeb3 then the JavaScript-powered animated buttons are at last working in all their glory. The problems that people were previously experiencing were actually due to peculiarities in the way the images were stored – not in Ben's Javascript skills. We have also changed the default browser to AWeb – since neither the demo of V3 or iBrowse2 are JS-enabled – so if you haven't already saved the AFCDPrefs to your system, you should be aware of this.

Remember that you will need ClassAct installed or, even better, OS3.5 to be able to use AWeb – as one puzzled reader who called me the other day discovered. You can find ClassAct in the +System+/Tools/GUI drawer.

RETRO GAMING

-Screenplay-/HD_Installers/WHDLoad

So, you've got a souped-up Amiga with OS3.5, loads of RAM, and a hard drive big enough to store the entire contents of the British Library. But wouldn't you still like to play all those old classic games that you used to on your faithful old A500?

The problem is that most of these games were designed to run from floppy disk only, on a stock A500 with a 68000 processor and Kickstart 1.3. Even supposing that a game doesn't have copy protection, you can't just drag it to your hard drive and expect it to work. Some clever trickery and patching is required first. And that's where WHDLoad comes in.

WHDLoad is modular system for installing old games onto your state-of-the-art Amiga's hard drive. Instead of the enterprising Amiga hacker having to start from scratch to fix any incompatibilities in a particular game, the task is made so much easier since WHDLoad does a lot of the hard work. All that is required is to write a WHDLoad module for that game, a so-called slave. Slaves exist for dozens of


WHDLoad will let play classics like IK+ on your modern Amiga hardware.


Blood Money is one of the many games that WHDLoad knows how to install to your hard disk.

gaming gems from *AlienBreed* to *ZeeWolf* as well as many of the great mega-demos. Check out the WHDIGames and WHDIDemos drawers on this CD for the complete set. These are all individually packaged as LhA archives, so you will need to unpack them before use.

Before you can install any of the games supported by a slave, you must first install WHDLoad itself. This is simply performed with the script provided. Remember that a lot of sleepless nights have gone into this tool and that WHDLoad is shareware, so if you use it, please register it.

WBTOOLS

-Serious-/Workbench

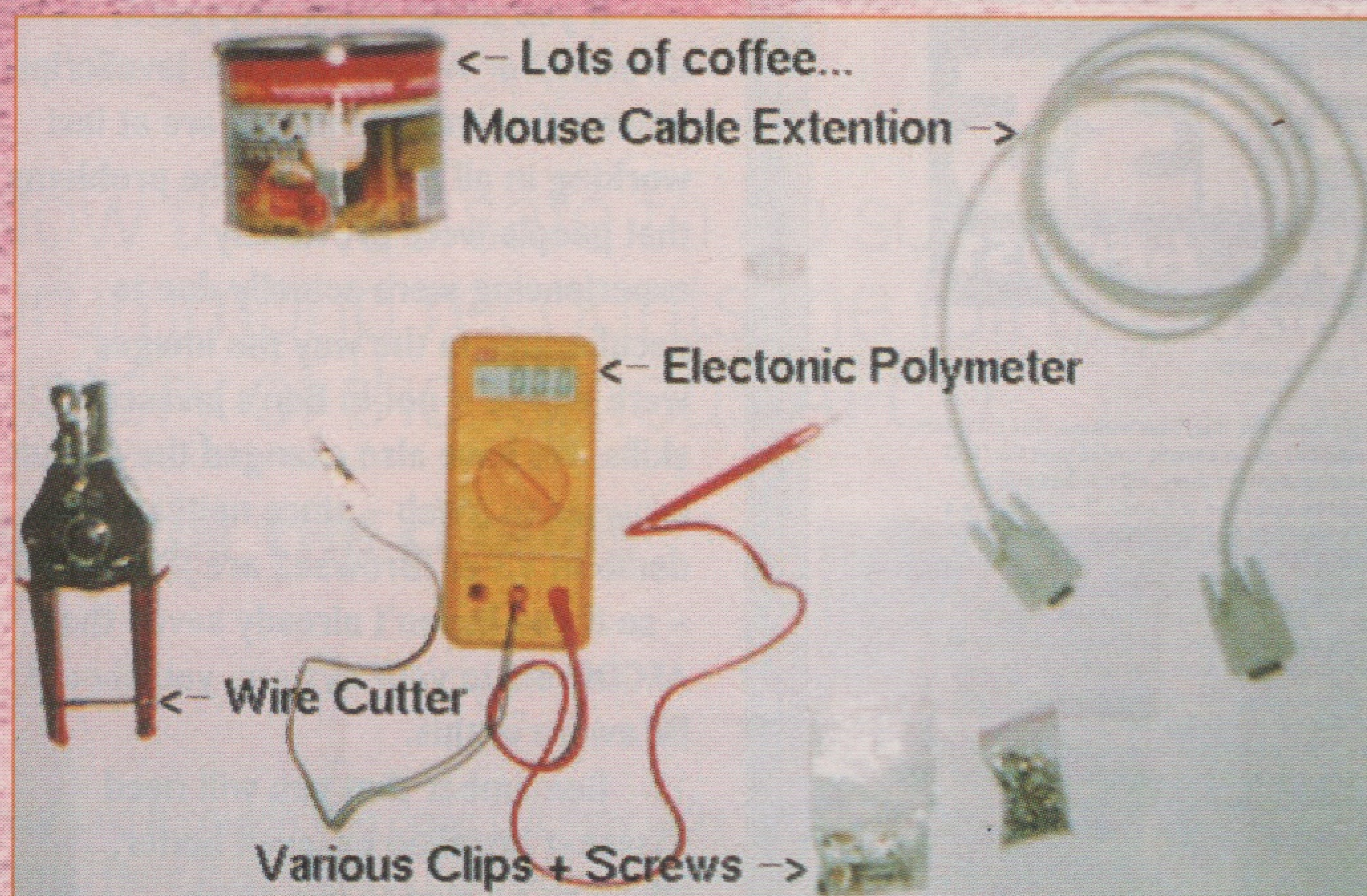
As usual we've brought you a collection of the best and newest tools for improving your Amiga's desktop.

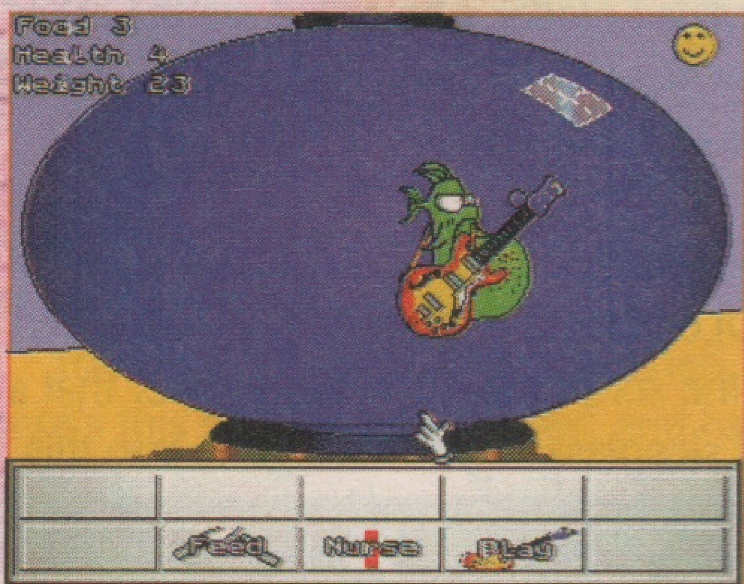
Dynamite, which has nothing to do with explosives, provides a neat new way of navigating through your hard drive. It puts a button at the bottom left corner of your screen which launches a series of menus

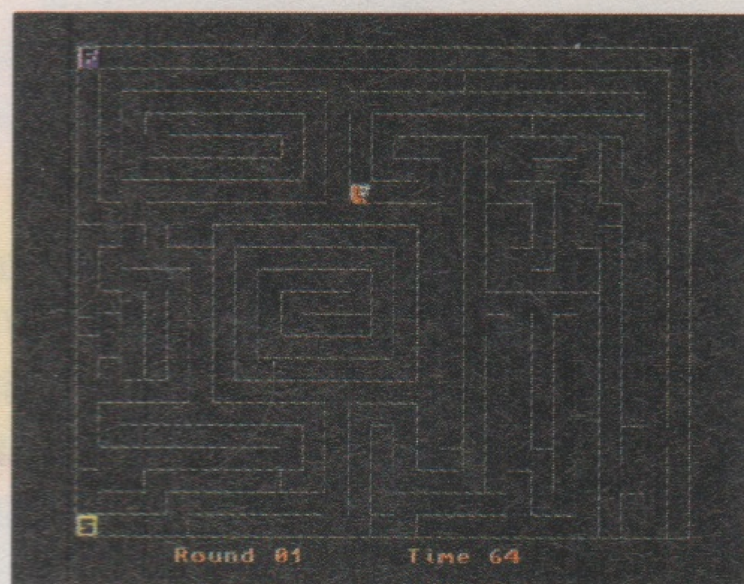
Continued overleaf ➡


Spruce up your desktop with our selection of the best new tools.

Your Stuff!









£50 WINNER!

This last ever *Amiga Format* coverdisc has an interesting selection of your contributions. The winner this time is Antony Dzeryn who has sent us a collection of tools designed for user of GRAC (the Graphics Adventure Creator) and a couple of whimsical games. There's a silly snail maze game and a pointless shoot-the-target game. Undoubtedly the best, though, is Antony's take on the computerised pet – here you have to look after a guitar-playing fish in a goldfish bowl. Well, it made me chuckle...

Kostas Theodoropoulos has sent us a DIY guide to rehousing an A4000 desktop to a tower. Kostas gives clear instructions, a list of parts needed and photographs to make things easier. If your funds cannot stretch to a Power Tower and you don't mind getting your hands dirty, then follow this guide and you shouldn't go far wrong.

which list the contents at each level of your filesystem hierarchy. Each entry is represented pictorially as well, with a reduced version of its icon. Left-clicking on a file will try and open that file, and right-clicking will pop-up a menu with various options – such as choosing a tool to open it with, copying or renaming the file.

If you feel that you need more space on your desktop then why not give FullBench a try. It removes Workbench's titlebar, thereby giving you (depending on your screen's font) an extra ten or so pixels of height to play with.

If you have upgraded to OS3.5 then perhaps you are missing some of those clever little tools than no longer work the latest version of the operating system. Users of SwazInfo might like to take a look at RAWBInfo, a replacement for Workbench's Icon Information window. It has many of the features that SwazInfo had, but has loads of new stuff which takes advantage of OS3.5. One of its handiest function is the ability to convert MagicWB icons into a new palette-mapped OS3.5-style icon.

Another favourite under OS3.0 was DefIcons, a neat little hack that gave files with no icon a fake icon according to their filetype. DefIcons44 replicates this function for OS3.5 and, what's more, it's completely system-legal. Also in the new version is a preferences editor, so that you can define your own filetypes.

A tool that is notably missing from all current Workbench releases is a GUI-based file find utility. How could they leave out something so simple and useful? Never mind. DirScanner is just such a tool, and has a flexible MUI interface. It allows you to specify a number of paths to search and supports AmigaDOS pattern-matching. It's just the thing for locating files without having to manually scour your hard drives.

THE AFCD THROUGH THE YEARS

It's the end of an era. After 52 discs, the *AFCD* series draws to a close. Since we have been continually striving to make our coverdiscs better – easier to use, clearer and with a minimum of wasted space – I thought it might be nice to chart some of the developments.

The *AFCD* was born on the June 1996 issue of *Amiga Format*. Back in those youthful days, as well as it being possible to access the disc from Workbench, it also had

PHOTOGENICS UPDATES

PHOTOGENICS UPDATES

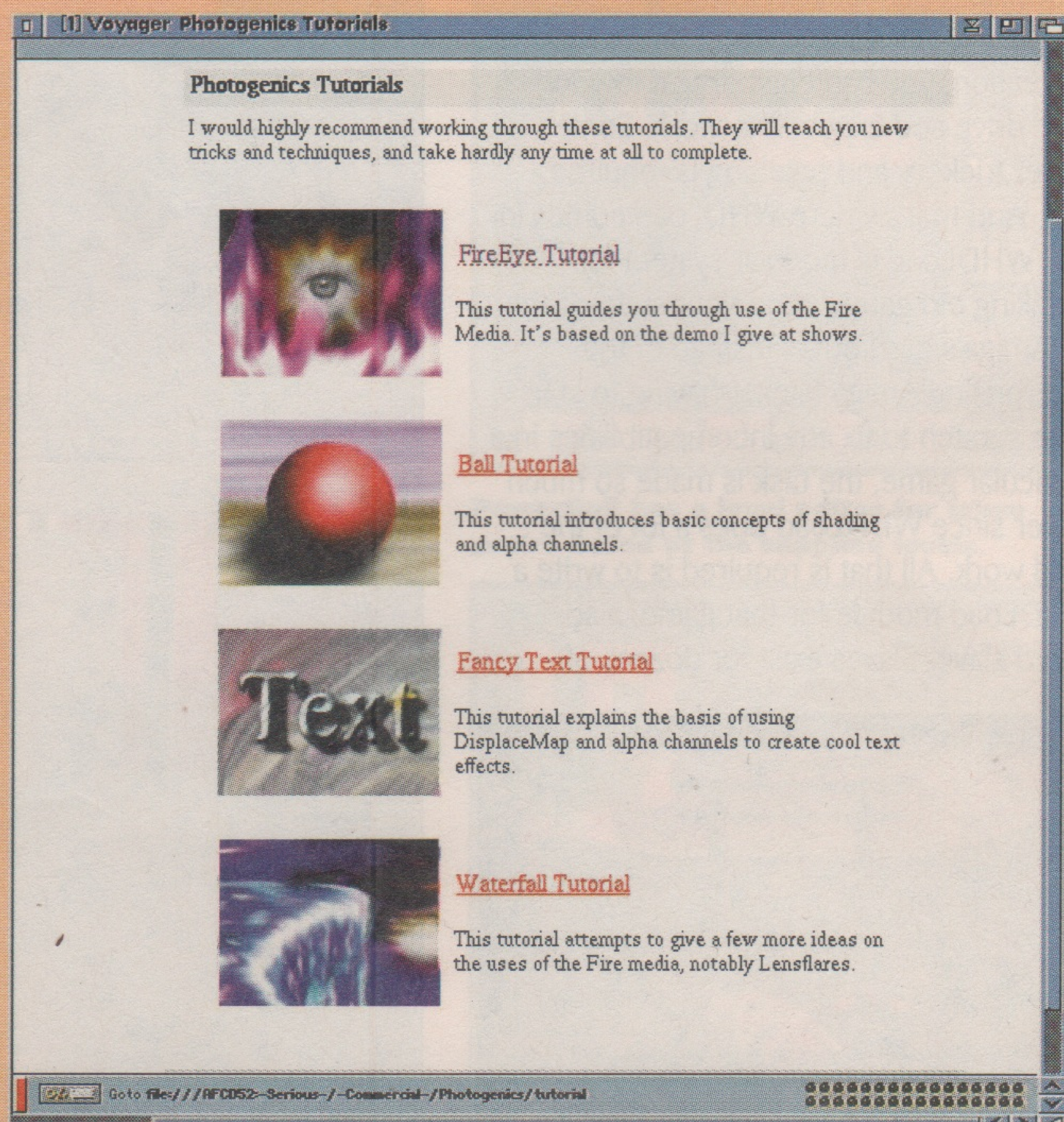
-Serious-/-Commercial-/Photogenics

***Photogenics* is Paul Nolan's *Paintshop*-pummelling art package for the Amiga – and now also for Linux. Version 4.2 was awarded an impressive 85% in *AF133*.**

***Photogenics* is constantly in development and we have the latest free upgrades for existing owners of any 4.x release.**

Update 67 brings you up to v4.3, and, for the more adventurous, update 75 gives you the beta release of v4.4.

Also included in this drawer are some excellent *Photogenics* tutorials by the author himself.

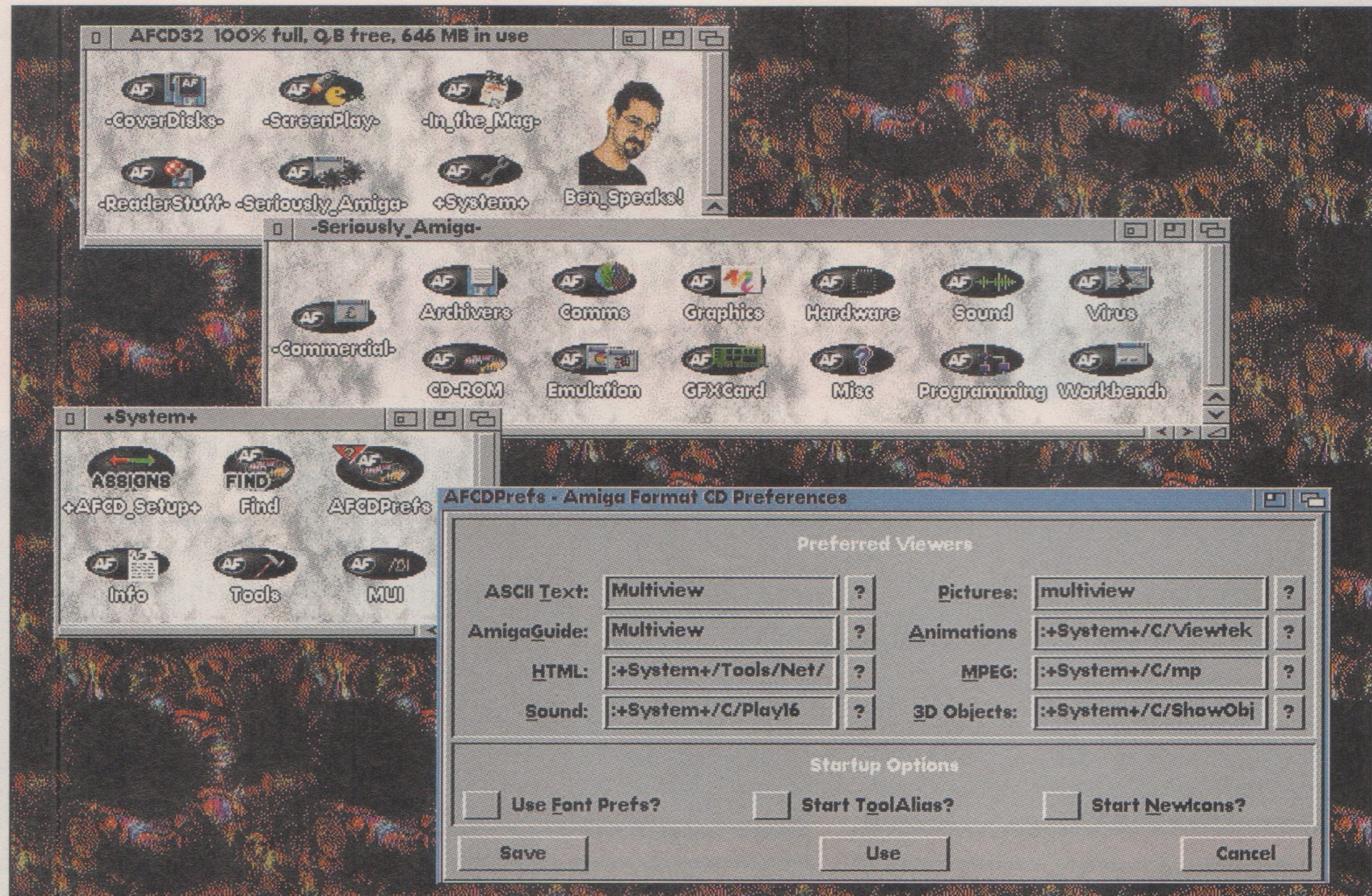


Get all the necessary tips on using Photogenics straight from the master himself.

a rather hideous hypertext interface created with CanDo. Fortunately this proved to be unmaintainable and was dropped when Ben took over editing with *AFCD4*. The task proved too much even for Ben, though, and compilation was entrusted from *AFCD11* to the capable hands of Errol Madoo at EMComputergraphic – a sterling job he has done to this day.

AFCD4 was also the first appearance of the editorial section on the CD, in this case, in the guise of 'Nick_Speaks!'. At this point, the text was in AmigaGuide format – not the lovingly crafted HTML we all know from today. Ben soon exhibited his lust for power and usurped Nick on the following disc – a place he steadfastly remained until *AFCD41*, when, with a rare show of modesty, his mugshot was replaced with an embossed AF logo and the icon renamed to Start_Here!.

One of the problems of the CD format is that, since it is a read-only medium, it is difficult for users to configure it to their own taste. *Amiga Format*'s solution was the *AFCDView/AFCDPrefs* system, crafted by Oliver Roberts, which first appeared on *AFCD18*. Any document, picture, or graphic file with *AFCDView* as the default



AFCD32 was the first to sport the NewIcons look.



AFCD1 had a ghastly CanDo interface.

tool would be opened with a viewer set up according to the users preferences and thus enabled you to view files with the tools you wanted. Oliver continually improved this system over the years, adding more filetypes, on-line help and simpler installation. Well done, that man. It proved such a useful system that on *AFCD36* we were finally able to bin the horrible setup scripts that had previously been necessary since day one.

Another area of the CD that has undergone constant tweaking is the icon images that we used. In the early days MagicWB was king, with those drab sepia tones. The NewIcons system gradually made inroads, however, first only for the CD and Ben_Speaks! icons. NewIcons overthrew MagicWB in the great revolution of *AFCD32* (although I personally never liked those black lozenges) with an image set drawn especially for us by Robert Miller. With the release of OS3.5, though, NewIcons reign was over and we redecorated with icons in the Matt Chaput's GlowIcon style, this time drawn by Matt 'Neko' Sealey.

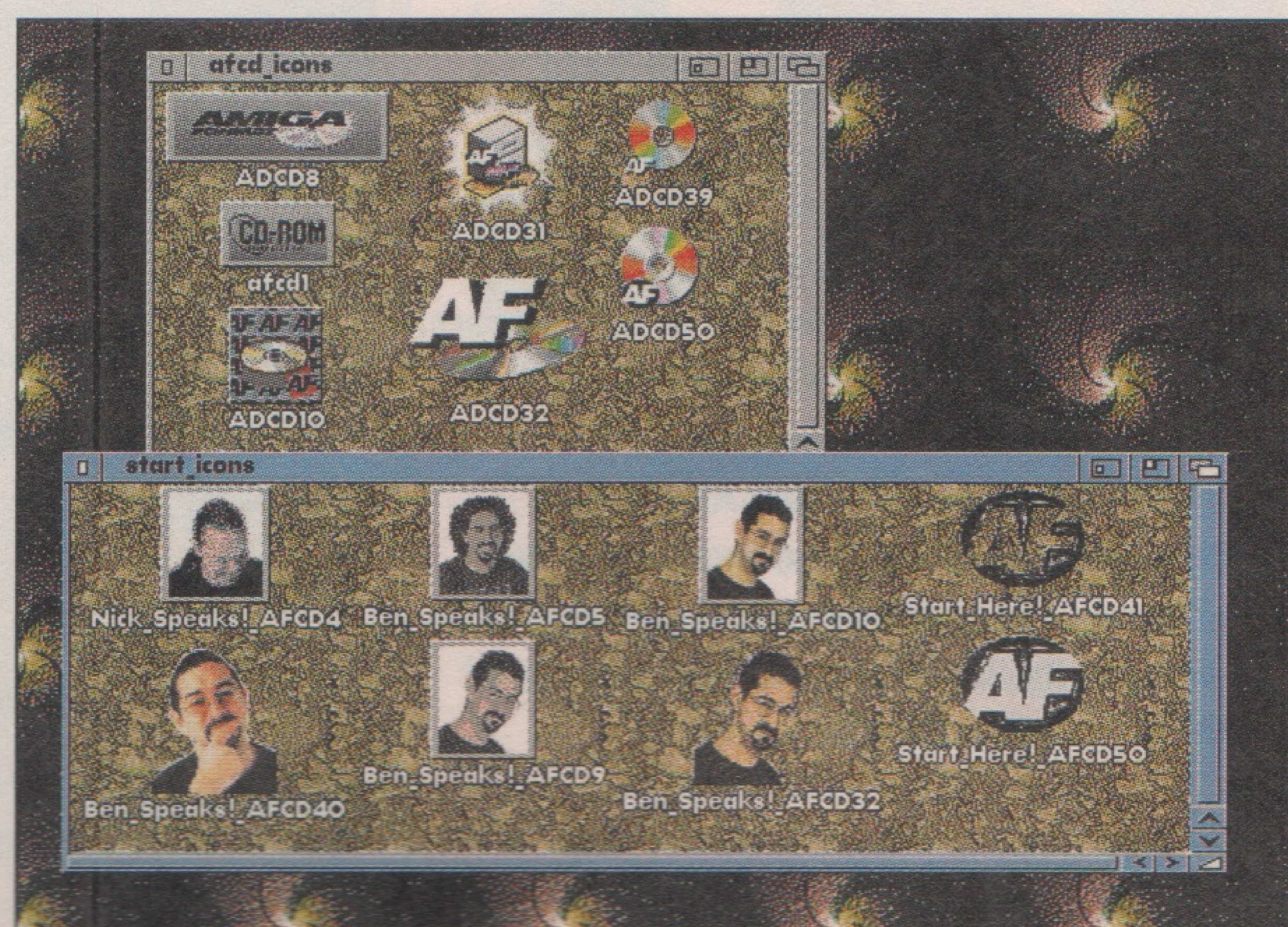
Finally, we always tried to provide as much useful information on the CDs as possible in an easily accessible form. Oliver's AFCDFind – a tool to search for any files in the contents of previous CDs – debuted on *AFCD17*.

Again, Oliver, put a lot of work into this and it evolved on-line help and eventually the ability to open the drawers it found on DOpus, Scalos and OS3.5 desktops. A further addition was the digest of all mails sent in that month to the afb mailing list. This first appeared on *AFCD39* in plain text form, but was updated on the following disc when yours truly wrote a tool to convert them into HTML. AFBase didn't start until *AFCD45* and contained a database of serious and games reviews in *Amiga Format*, Amiga Angels and ShopWatch listings. This is was implemented with MUIBase by, yet again, Oliver Roberts. We still never got the thing finished.

So, there you have it: a potted history of the *AFCD* – complete and unabridged. And it's all true – only the names have been changed to protect the guilty.

Richard Drummond

Icon evolution. The AFCD and Start icons through the years.



DISCLAIMER

This *AFCD* has been thoroughly scanned and tested at all stages of production. We recommend that you always run a virus checker on ANY software before running it. Future Publishing Limited cannot accept any responsibility for disruption, damage and/or loss to your data or your computer system which may occur while using this disc, the programs or the data on it. Ensure that you have up-to-date backups of data contained on your hard drives before running any new software. If you do not accept these conditions, do not use this disc.

DISC NOT WORKING?

If your *AFCD* is defective, please return it to the address below. Please make sure you have followed our installation procedures correctly to ensure that there is no physical problem. Please send us the *AFCD* along with a description of the fault (not forgetting your name and address). A new working version should be returned to you within 28 days. The return address for faulty discs is:

TIB PLC • UNIT 5 • TRIANGLE BUSINESS PARK • PENTREBACH • MERTHYR TYDFIL • CF48 4YB

Your *AFCD* should only need replacing if the CD itself cannot be read. If you're experiencing problems with an individual application, phone our technical support line This is open between the hours of 2pm and 5pm every Tuesday.

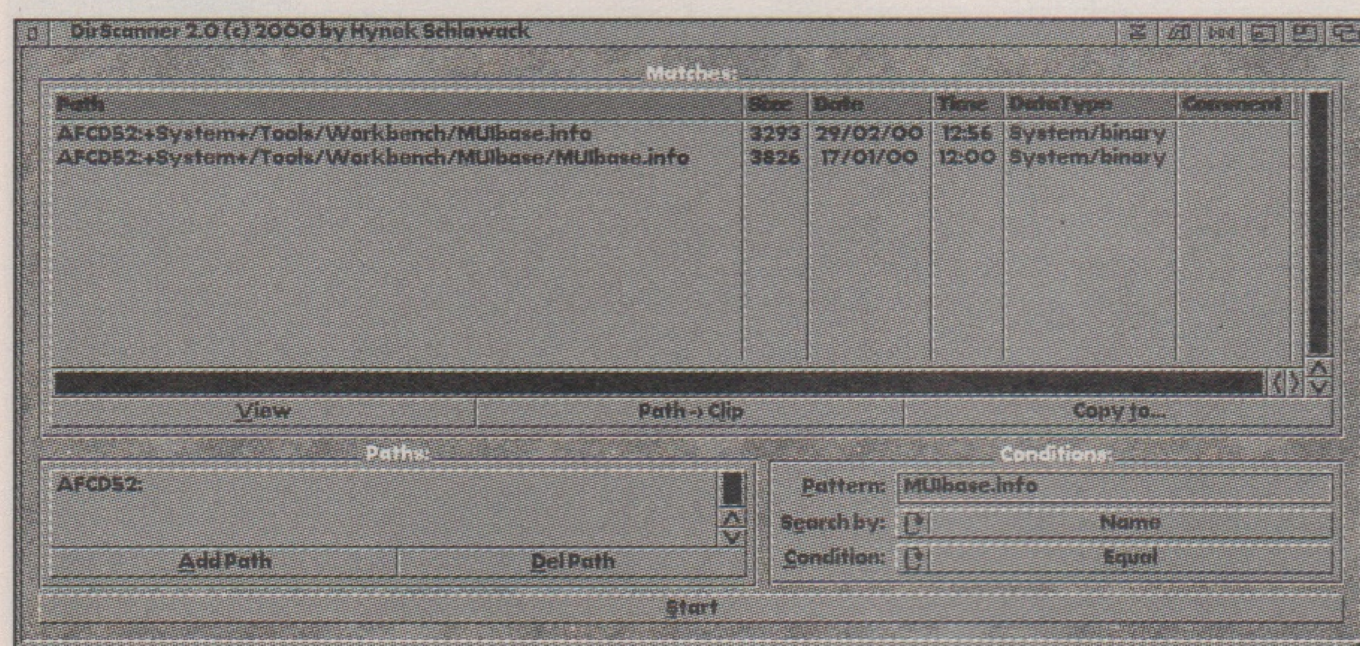
Tel: 01225 442244 Fax: 01225 732341
Email: amformat@futurenet.co.uk
(Please remember to put "Coverdisk" in the subject line.)

Please note that the helpline staff provide assistance with technical problems directly related to the CD and cannot provide training on the software or hardware in general.



Serious Disk

Get your free Amiga software while it lasts – our fantastic giveaway offer must end soon (like really soon)



Just where did I put MUIBase? Dirscanner comes to the rescue!

DIRSCANNER

If you are forever "losing" files on your hard drive, *DirScanner* could be your answer. It isn't as powerful as filefinders such as *Simplefind* but it is compact, powerful and it gets the job done. It allows you to search by name, by date, by size and by comment. The files that it finds can be viewed, copied or their path may be copied into your Amiga's clipboard.

DirScanner requires MUI but should work on any Amiga with Workbench 3. Installation is simply a matter of dragging its icon to your hard drive.

ICONIMAGECOPIER

IconImageCopier is a program that will help you copy icon images between icons. It has support for almost all icon types, including Newicons, and all operations are performed by simply dragging icons onto its "copy" and "paste" appicons.

IconImageCopier should work on all Amigas and comes with an installer script for easy installation.



AF24 (July 91) – We review CDTV.

LUPE

Lupe is a magnification tool that allows you to magnify any part of your Amiga screen and display the magnified image in a separate window. It can be bounced onto most public screens and even allows you to save the contents of the magnification window.

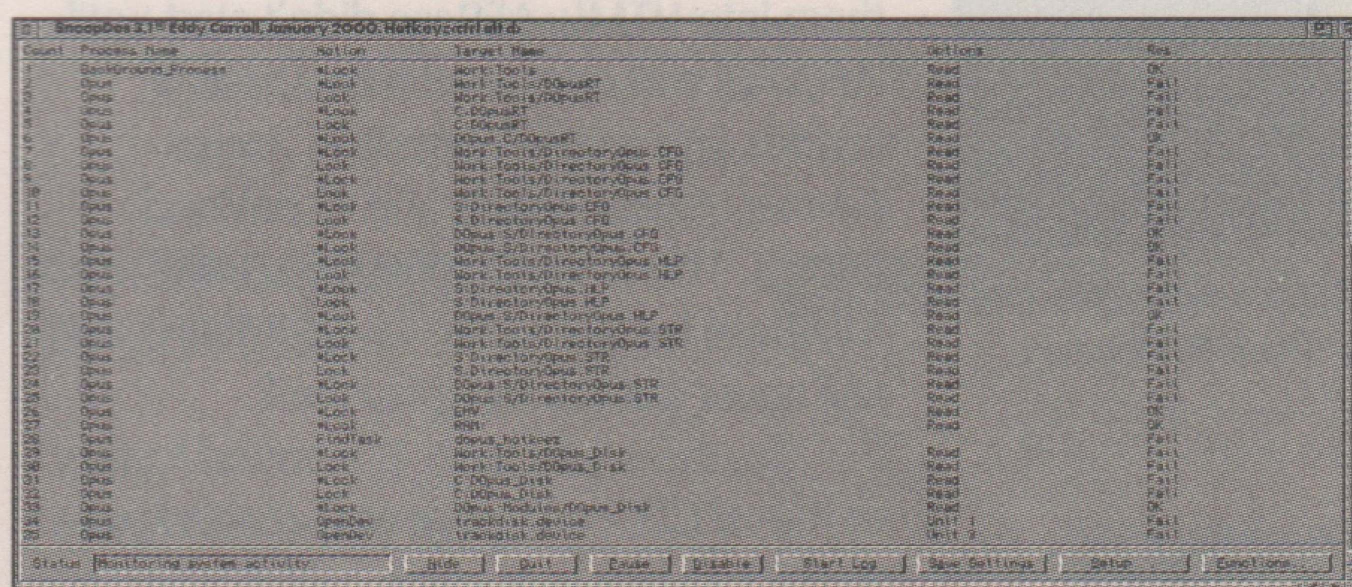
Lupe should work on most Amigas. An installation script is supplied but is not really required as installation only involves copying its icon to the desired location.

SNOOPDOS

SnoopDos is a utility, that should find a place on every Amiga user's system. It allows you to monitor a variety of system operations carried out by programs on your Amiga. This includes which files a program is trying to open, which fonts, files and libraries a program requires, which devices and environment variables it is looking for, and so on. This new version fixes numerous bugs and enforcer hit problems.

Snoopdos is entirely self contained and installation is simply a matter of dragging its icon to the desired location on your system. If you wish to use its online help feature, you should also copy the *SnoopDos* guide file to the same location.

SnoopDos shows you everything that's going on behind the scenes.





Magnification is the name of the game with Lupe.

XOPA

Xopa, in simple terms, can be viewed as a system monitor. It displays a whole host of system information including complete system information and specification, system tasks, which libraries and devices are open and which assigns are currently in operation. It doesn't stop there, however; *Xopa* lets you manipulate some of this information by allowing you to, for example, shut down windows, tasks and even programs. An installation script is supplied to assist the installation process and *Xopa* should work on most Amigas. Be warned though, due to *Xopa*'s nature, it is a very powerful program and can be potentially dangerous to your Amiga in the wrong hands. Read the supplied documentation before using it.

Errol Madoo

PASSCODE

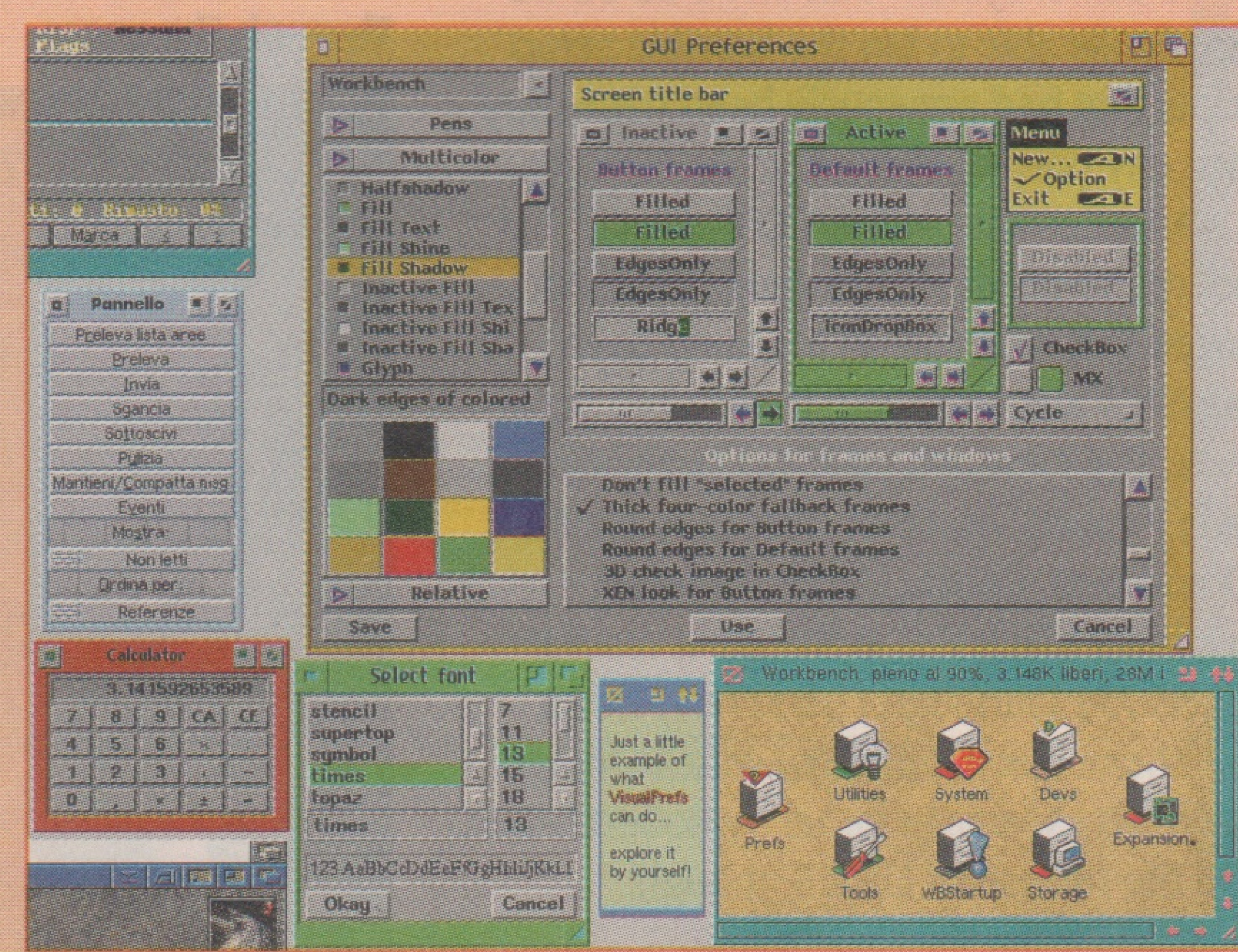
Passcode is a little program that brings up a little window that allows you to enter a user name and password to "lock" your Amiga while you are away from it. Once you have entered your user name and password, you click on the "go" button and your Amiga is locked and therefore protected from tampering. On your return, type in your user name and password to unlock your Amiga and carry on working, safe in the knowledge that all is how you left it. *Passcode* can be started from either Workbench or shell and can even be started from your user-startup.

It should work on all current Amigas, though it should also be noted that *Password* isn't foolproof; a simple reboot will bypass its security and also, since it opens its own screen, simply switching screens on a graphics card equipped Amiga will allow you to carry on working on the other screens.

VISUALPREFS

***VisualPrefs* is a system patch to customise the look and feel of your Amiga's GUI (graphical user interface). It allows you to tweak just about everything on your Workbench screen including the thickness and height of window borders, the style of titlebar gadgets and even the physical position of the text in the titlebars! Take a look at the screenshot to see how configurable *VisualPrefs* actually is.**

***VisualPrefs* requires any Amiga with AmigaOS 3.0+ and a hard drive. A graphics card is recommended but not required. Due to its complexity, installation is best performed with the supplied installer script.**



If you like to tweak your GUI, VisualPrefs is just for you!

Games Disk



Come ride the heavens in a Croatian space ship, or weave some magic in WiZiO's wonderful world...

BROD

Brod (the Croat word for ship) was created using Amos by Zeljko Kolarevicis and is basically a space shooting game loosely based on *Galaxian*. What makes this game slightly different however, is that it contains several sub-games which pop up when certain events are reached.

When you start *Brod* you are in a space ship and your task is to protect your planet from waves of alien ships that are intent on destroying you.

And, as if this wasn't hard enough, you are further hampered by a limited number of rockets – when these run out you need to recharge your ship. Recharging is done from the sub-game menus, which pop up when your rocket supply is depleted.

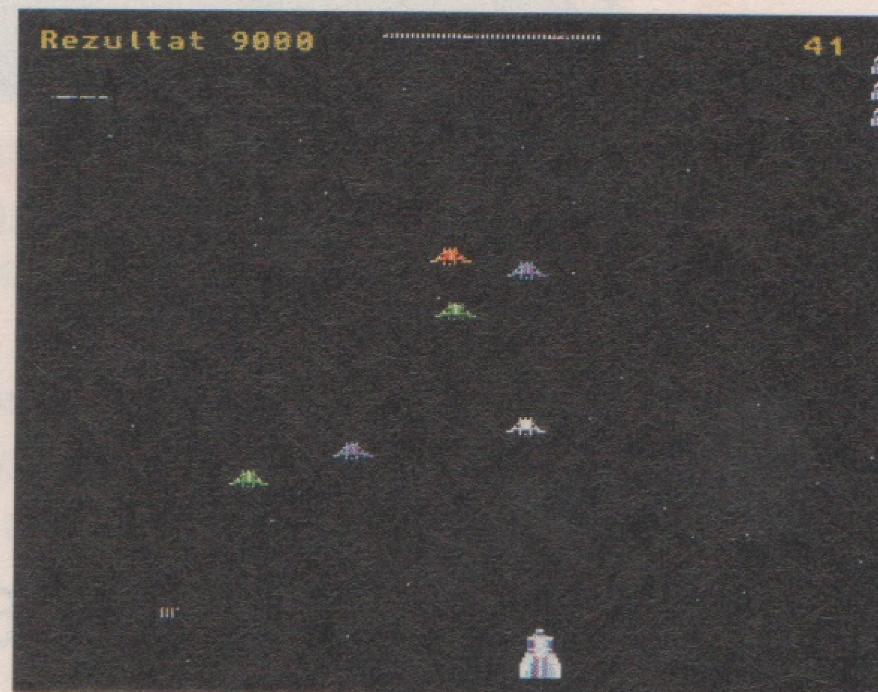
In these menus, you are given the choice of which of the sub-games you would like to play. *Brod Pinball* is perhaps the best of these; you enter the *Brod Pinball* zone where you play on screen pinball to gain points to buy and sell rockets.

You can pause *Brod* at any time by pressing the "Help" key. The game speed, for both *Brod* and *Brod Pinball* can be adjusted by using your cursor up and cursor down keys.

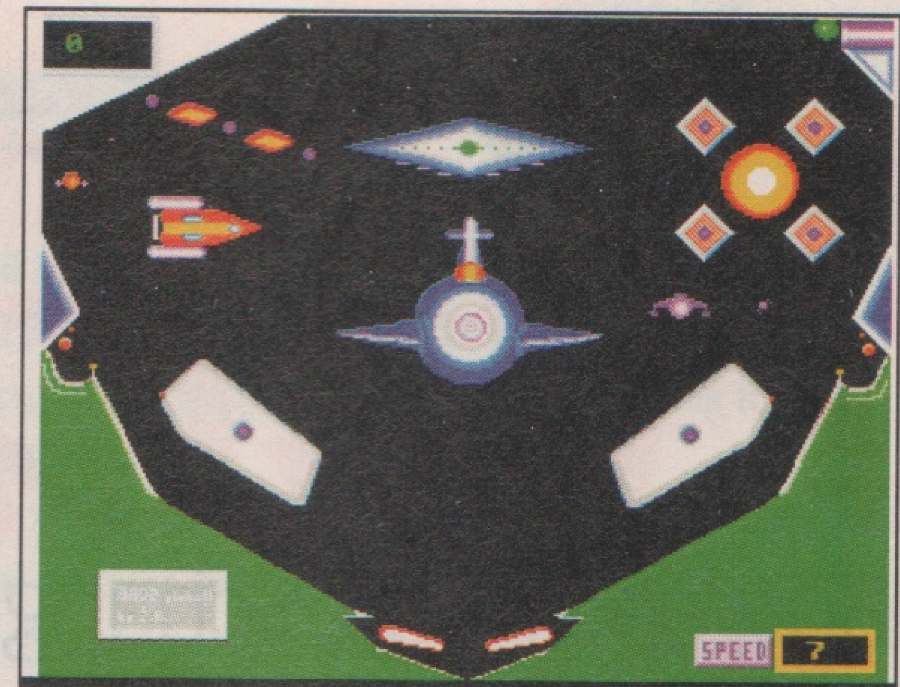
To installing Brod, drag its complete directory to the desired location. Although Zeljko only tested *Brod* on A1200s, I played it on a Cybergraphics equipped A3000 and it worked fine – so it will probably work on most Amigas.



AF33 (Apr 92) – AF becomes Britain's best-selling computer magazine with an ABC of 130,143. Even so, there are two letters printed that complain about the 157 pages of advertising in AF32 (out of a total of 228). We also move to a constant double floppy issue.



Brod: a Galaxian-style space shooter with Croatian space craft.



In Brod, you are constantly hounded by evil aliens bent on destruction. Nasty.

WIZ²

WiZ² is a platform game where you play WiZiO the Wizard – a mage who roams the land collecting coins, stars and special spells in a full screen scrolling world.

As well as collecting all these coins, stars and special spells that will assist him on his journey, WiZiO can also cast spells for additional powers and jumps simply by using the stuff he has collected. The game also features bonus level dungeons, hidden specials and hidden dungeons.

WiZ² is almost exclusively controlled with a joystick plugged into port 2 and there is even a two player option, should you fancy trying to complete the game with a friend. And if the ten supplied levels don't offer enough of a challenge for you, *WiZ²* also comes supplied with the marvellous feature of a landscape editor that allows you to easily create your own levels. The level editor has full online help and this can be accessed by pressing – you guessed it... the "help" key.

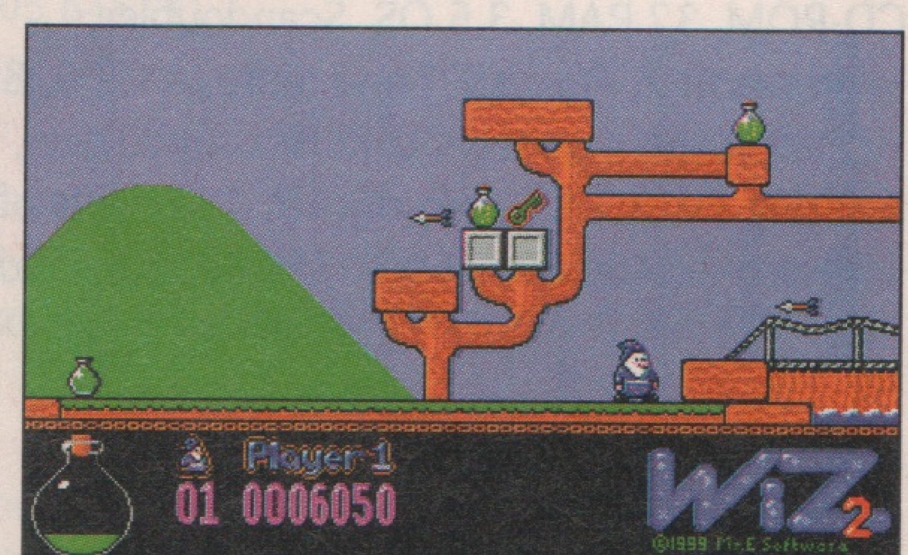
The installation of *WiZ²* involves the extremely complex procedure of dragging its directory icon to the desired location and double clicking on its icon. It has been programmed and compiled using AMOS PRO, so it should pretty much work on all current Amigas.

WiZ² is the sequel to the original 1998 (and incomplete) release of *WiZiO* that only featured 4 levels. In spite of this, it still managed to win the highly coveted *Amiga Format* "Game of the Month" award in 1997 and was included on *Amiga Format CD35*.

Back then, Steve Eaborn, the game's creator, claimed that he had lost interest in finishing the game and the game's future didn't look great.

Errol Madoo 



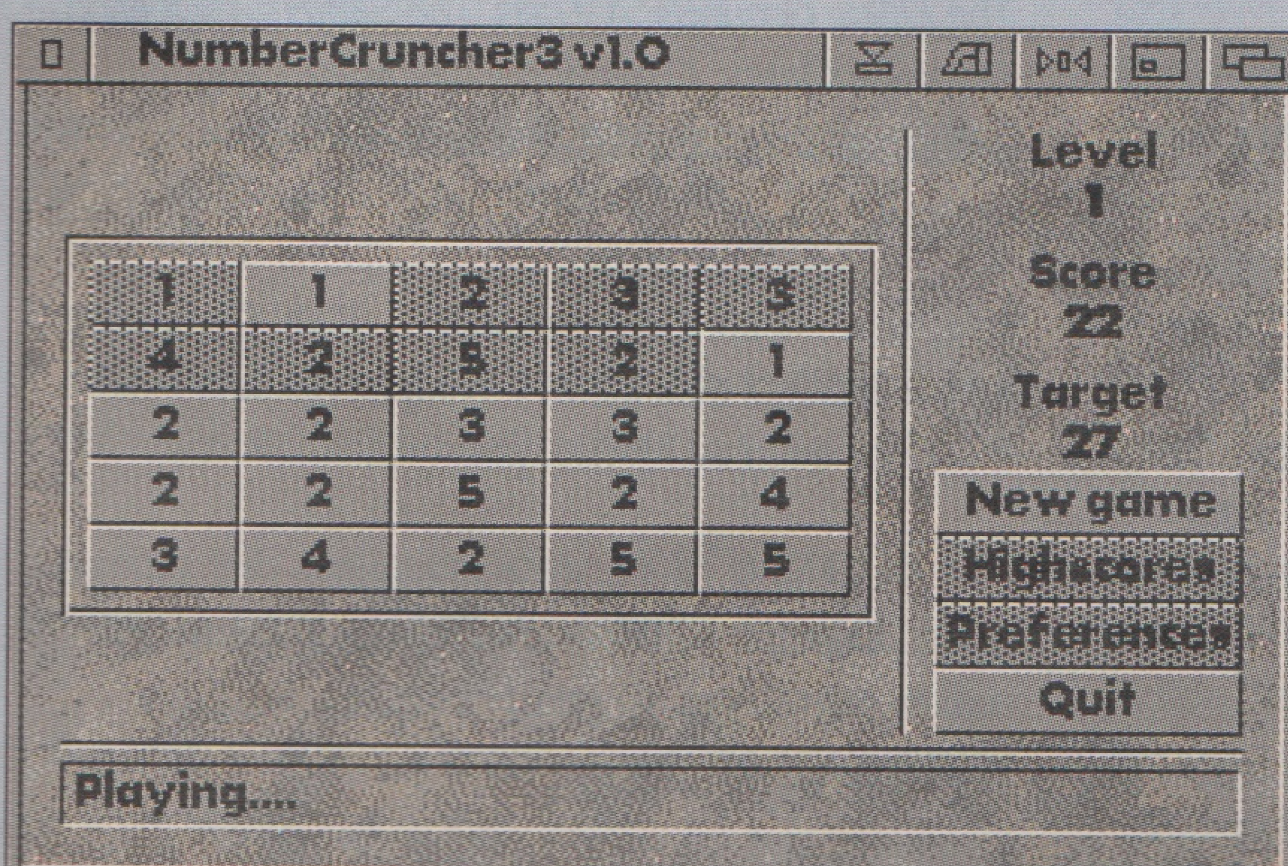


Every time WiZiO casts his wand, special things happen that help him on his quest.

NUMBER CRUNCHER

***Number Cruncher* is an educational game designed to assist children in improving their addition skills. It starts with simple addition but as the game progresses the "sums" get harder and harder. In the game you are presented with a grid of 25 squares and a target score. Each of the 25 squares contains a randomly selected sequence of numbers.**

Your task is to select the number which you must add to your score to attain the target. As an example, if your score is 22 and the target is 27 you will need to click on one of the squares that contain the number 5 to reach the target number. When you complete a grid (when all 25 squares have been cleared) the game will progress to the next level and the sums get a little harder. *Number Cruncher* is completely self contained and installation is just a matter of dragging its directory to your hard drive. It doesn't require any special libraries and its only external requirement is that you have MUI installed on your system.



NumberCruncher is a great way improve your child's addition skills.

DISK NOT WORKING?

We take every care to test the coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back with 2x26p stamps and an SAE to:

AMIGA FORMAT (insert name of disk) • TIB PLC • UNIT 5 • TRIANGLE BUSINESS PARK • PENTREBACH •MERTHYR TYDFIL • CF48 4YB

If there is a manufacturing error then the stamps will be returned with a replacement disk.

Free! Reader Ads

Buy, sell and exchange your Amiga hardware and software in the best free ads pages around

FOR SALE

A1200 for sale – complete with high density floppy drive, mouse, mouse mat, p/s, WB 3.0 disks, PC monitor adaptor, commercial software & PD discs. In very good condition. Asking price – £80 includes p/p. Contact: joseph.s2@ukonline.co.uk to sort out the arrangements

A3000, 8M RAM, dual hard drives, 4x CD-ROM, 3.1 upgrade – £200 ☎ 01524 850794

Amiga 1200 hard drive, CD-ROM, Amiga 500+ Power Tower for 1200, thirty games, joystick – £150. Buyer collects. ☎ 01707 263309

A1200, desktop 10M, 1.4G hard drive, sound sampling hardware, external floppy, mouse, joystick, various software packages for sound, art and business. Lots of games – £225 ono ☎ 01633 674235

Blue DS/DD blank disks with labels – 10 for £3, 25 for £7, 50 for £13. Payment to Anthony Page, 126 Kingscote, Yate, Bristol BS37 8YG

A1200 Power Tower, 4.1G hard drive, 36-speed CD-ROM, 32 RAM, 3.5 OS. Scandoubler, *Wordworth 7*, *PPaint 7.1* and more. A1200, 850 HD, 32 RAM, 4-speed CD-ROM, 30x40 acc., amazing TV, 3.1 OS, *Wordworth 6* plus lots of software – £450 the lot ☎ 01890 883502 Coldstream

A500 PSU – £10, external disk drive – £10 plus other small items and games. Email scotty99@madasafish.com

A1200 with hard drive and installed games. 4M extra memory, mouse, joystick, cables, PSU, manuals and Workbench disks – £75. Boxed games free to buyer ☎ 0181 647 7731 Croydon

Boxed A600 plus software – £50 plus p&p. A4000 desktop case and Zorro 3 daughter board – £30. Give me a call and make me an offer! Contact Martin on ☎ 020 7 495 2657

A1200. 250M hard disk, 10M RAM. Phillips CM11342 colour monitor, Citizen Swift 24 colour printer. All boxed as new – £100 ☎ 029 2056 7730 evenings

SWOS, football glory, FIFA International Soccer, *Jimmy White's Whirlwind Snooker, F19 Stealth Fighter, War in the Gulf, Cybercon III, Lemmings II, The Tribes* – £3 each ☎ Terry 01709 814296

Aminet box set 1/2, Amiga Classix – £4 each. *CDPD* 1-4, 17-bit 1-5 – £2 each. *Sounds Terrific* 1/2. Lots more at £1. Contact PW Soong, 77 Kingstanding Road, Perrybarr, Birmingham B44 8JS

Canon BJC 620. Warranty August. Separate ink tanks. Spare inks – £65. Studio printer drivers V2.2 – £10. Multishine monitor – £65. Northamptonshire ☎ 01978 751079

***Amiga Format* issues 10-110 + disks. To good** home. Monitor – Multiscan – CD32/SXI/500 Datec III replay/games, etc. To good home too. Bargains! ☎ 0117 963 5597

A1200 with 1084s monitor, 6M RAM with 68030/50 Blizzard expansion, 36x CD-ROM, 230 PSU, lots of CD-ROMS, 6 floppies, including *TurboPrint*, 7 mouse and system disks. All *Amiga Format* magazines. Price with printer – £400 ono ☎ 01473 748353

540 meg 2.5" hard drive, cable, screws, slave jumpers, *Wordworth 7.0, D Paint5.0, Scala 300*, internet installed – £40. Also 8 meg simm – £12. Email willpower@odene.freeserve.co.uk ☎ 01762 344641

Amiga 1200 tower, Zorro board, Blizzard 1230, 32M, 6.5Gb HD, 16x CD-ROM, 4-way IDE, XL 1.76M, Midi interface, 3.1 Kick, WB, mouse, joystick, auto-switch, 12-inch Multiscan monitor, 75 CD-ROMs – £220 ono ☎ Mark 0181 509 3289

A1200, 6M memory, 170M hard drive, 2x CD-ROM, mono printer, software, including *Blitz Basic* and *BUMs*. Loads of mags, books and video – £170 ☎ 01295 263654. Email heywood18@supanet.com

A1200, 32M RAM, 250 Mb HD, 030 CPU, 68882. FPU, Squirrel interface, 2x CD-ROM, external floppy, original software and manuals, no box. Also some original boxed games, CDs, mags, etc – £250 ovno. Buyer collects or pays postage ☎ 01978 290033

Citizen 120D black and white printer. Excellent condition with manual – £25 + post ☎ 01297 552517

***ST/Amiga Format* magazines, issues 1-3 with** disks for sale or exchange. Offers to grahampersson@ukonline.co.uk

A3000 14M RAM, 800M HDD, Picasso II gfx card, 2x CD-ROM. SyQuest E2-135 +6 cartridges, Star LC/OC colour printer, KS/WB 3.1 upgrade – £400 ono ☎ 01249 654287

Commodore Amiga 500+ with one external drive, 160 games, Workbench extras, plus fonts, manuals, instructions, with some games, mouse, 3 joysticks and *Mini Office* with Manual ☎ 01922 447732 Maria

Speedball, Castles* (Italian) – £2. *Gloom 3D, *Liberation, Premier Manager, Jurassic Park, Manchester United Premier League Champions, Worms, Street Fighter II, Disposable Hero, Black Crypt, Dream Web, Nick Faldo's Championship Golf, Hero Quest II, Brutal Football, Mr Nutz* – £3 each. *Theme Park* 32-colour version, *Cannon Fodder, Cannon Fodder 2, Frontier Elite II, Kings Quest Six, MicroProse F1GP, Alien Breed 3D 2, The Killing Grounds, A-Train, The Settlers* – £4 each. *Delphine Classic Collection* – £5. *Myst* – £7 nsthomas@clara.co.uk ☎ 01536 724309

Commodore MPS 1230 printer, excellent condition – £25. Colour monitor – £30, Commodore Amiga external disk drive, boxed, never used – £7 ☎ 01922 447732 Maria

***Amiga Format* issues 10-110 + disks. To good** home. Monitor – Multiscan – CD32/SXI/500 Datec III replay/games, etc. To good home too. Bargains! ☎ 0117 963 5597

***ST/Amiga Format* magazines, issues 1-3 with** disks for sale or exchange. Offers to grahampersson@ukonline.co.uk

WANTED

'040 or '060 expansion for A4000, with room for extra memory needed. Also 16-bit soundcard for up to £100 ☎ 01474 706114

Marconi 3-button trackball or similar – please contact Robert Atkinson, Vinquin, Costa, Evie, Orkney KW17 2NN ☎ 01856 751436

***Elite* original with manuals for A500 desperately** wanted. Please contact Adrian on ☎ 07973 987650 or email adrian.fletcher@ukonline.co.uk

***Ishar Legend of Fortress* disk 2. Contact Matthew** Muir ☎ 01294 833838

***Excalibur* PD game required. Send to Anthony** Page, 126 Kinsgcote, Yate, Bristol BS37 8YG

The emulator "The A64 Package" by QuesTronix, version 3.01 or later, with or w/o cable. Email amellin@hotmail.com

Scala full version. Must run on A600 HD floppies only. Needed to title videos ☎ 07714 486497 Doncaster area. Must be local-ish.

Please, please, please! *Gods* desperately needed! Will sell grandmother if necessary. Contact Chris Moorey on ☎ 00 30 841 41006, or by post: Akti Olountos, Elounda 72053 Greece.

***Easyscript WordPro* for Commodore 64, C64 C/W** 5.25 drive, SVHS Genlock for A1200, *Clarissa 2* original S/W or cover disk, *Distant Suns* S/W ☎ 01278 722266

Original copy of Taito's 1989 *Renegade*. Will pay for original copy of Taito's 1989 RENEGADE. eric.park@uk.dreamcast.com

GVP A530, preferably with 4M simms, or 4M simms on their own. Apollo board with 16M minimum RAM 040 0r 060, Nov 1997 *AFCD103* to complete my set. SCSI hard drive. Barry Dymock ☎ 01582 513597

Desperately seeking some old Amiga 500 titles: *Fuzzball* and *Super Putty (System 3), Hawkeye, Creatures, Mindroll, Venom Wing,* and *Armalyte (Thalamus).* Original versions ONLY! Andy ☎ 01642 760930 or email: arlizard@hotmail.com

Can anyone help? I've lost my disc of *DSS8* by GVP. I've got manual and box but someone has relieved me of the disc ☎ Ralph 01508 488410

Amiga 4000 Tower or Desktop, any model. Can collect if in Swansea or surronding area ☎ 01792 515119. Email alex@amigax.freeserve.co.uk

Amiga contacts on the Internet. TurboPrint 6 or 7 Please email me on homer@fatboy.2sxy.com

Rombo Vidi Amiga Digitiser 24 RT pro/12 RT or pro-grab 24 RT Enzo ☎ 01527 529917 any time

Squirrel interface wanted. Email darren@crown.free-online.co.uk

Manual and software for Commodore MPS 1270A ink jet printer ☎ 01555 663992

PERSONAL

Also see the AmigaAngels document on our CD.

We have an idea for the CD. Is it possible for someone to compile screensavers and WB backdrops with images of famous people (sports stars, film stars, pop stars, country scenes, nostalgia (i.e. Englands WC win of '66) etc, which can be obtained over the Internet – particularly for those without Internet facility?

Power XL1760 high density half height 8 Mikronix floppies need repairs. Can anyone out there fix them? Email willpower@odene.freeserve.co.uk ☎ 01762 344641

Would the Amigan in Greece who kindly sent me a catalogue disk, please contact me, as it doesn't load and there is no address. Call Chris Moorey on ☎ 841 41006

Leading non-print Amiga magazine, AIO, requires new writers to contribute reviews, articles or other help. For more information, email aio@aio.co.uk Anyone considered

Website, HTML and FTP help given for beginners to get you started in designing and uploading web pages. Contact webhelp@badger.org.uk or see my site at http://www.badger.org.uk/webhelp

I am an Amiga artist/musician wanting to do graphics, or music for your PD, shareware or games. Highly proficient with OctaMED's *SoundStudio* and *Deluxe Paint*. Both AGA and standard Amiga formats. ☎ Vivian 001 505 835 2841 (New Mexico)

Any Amiga users new to the Internet who want some free links/galleries and downloads to get them going can go to my site at http://www.g251273.freeserve.co.uk or email me (Paul) at pol@g251273.freeserve.co.uk

Any Amiga magazines or disk magazines require another contributor? I have knowledge of A1200 and other Amigas. Will work for free. Article previously published in *Amiga Format*. ☎ Ross Whiteford 01738 850732

BBSes

The Forum! BBS online 24 hours, Kilmarnock, Scotland. Over 35 members, 2,000+ files available, including games, pictures, utilities, etc. 36K. Sysop: Jamie Maguire. Run by a software development student ☎ 01563 540863

Promised Lands BBS, online 10pm-9am 24hrs weekends. Sysop: M!k. Umlimited downloads, online CD-ROM speeds up to 33K ☎ 01562 66829 email mik@plbbs.fsnet.co.uk

Arachnoids BBS. Leicestershire Online 24hrs. ☎ 01509 551006. Friendly sysop, over 10,000 files online. No ratios, everything free. Ninja@Arachnoids.freeserve.co.uk

Bedlam BBS, Leicester, online 24 hours. ☎ 01162 787773

Dirt Tracker BBS: the headquarters of Powernet Mail network, hubs and nodes and points available on request. Help package available. One of the UK's no.1 leading BBSs with a friendly attitude ☎ +44 (23) 8036 5112 (24 hours)

Quest BBS, Wakefield. West Yorkshire's largest BBS with over 30,000 files online, including the latest seven Aminet CD-ROMs. Headquartes of CoNnEcTiOnS magazine detailing the BBS scene. Online weekdays, 6pm-6am and weekends, 2pm-6am ☎ 01924 250388

Entertainment BBS, Wigan, online 24 hours. ☎ 01942 221375

Skull Monkey BBS, Lincoln. Online 24 hours. ☎ 01522 887933. Friendly sysop. Email sns@skullmonkey.freeserve.co.uk – keeping the Amiga alive.

Want to chat about anything and everything with people all over the globe? Then join Fluffynet – the fluffiest Fido-style BBS mail network! ☎ Total Eclipse BBS +44 (0) 870 740 1817 or visit http://www.fluffynet.n3.net for information on how to join. Hubs and nodes available. Anyone welcome!

TABBS 2000 BBS, online 24 hours. Running Xenolink v2.8, Amiga sysop with over 15 years of Amiga experience. 20,000+ files online. File requester. Amiga support given. Hertfordshire. ☎ 01992 410215, email sysop@tmbbs.freeserve.co.uk

Total Eclipse BBS, ☎ +44 (0) 1983 522428, 24 hours. 33.6K, home of Liquid Software Design and MAX's Pro support

Elevate BBS, Hants, online 24 hours. ☎ 01329 319028

Moonlight BBS, Bedford, online 6pm-8am, 24 hours at weekends, ☎ 01234 212752. Sysop: John Marchant. Email gnome@putnoe.u-net.com.net Official Transamiga Support BBS, unlimited downloads, friendly sysop with excellent knowledge. Aminet online. Run for free by an experienced Amiga programmer

X Zone BBS, supporting the Amiga for over two years. Do you want the latest files? ☎ 01635 820590, 6pm-1am, modem callers only (33.6K)

On The Oche BBS, Waterlooville, online 24 hours. ☎ 01705 648791

USER GROUPS

Also visit the AmigaSoc website on our CD.

Would all the people who are, or who would like to be on my helpline, please phone me, so that I can bring the list up to date. Terry ☎ 01709 814296

Amiga Club International members receive a bi-monthly magazine disk and PD programs plus helpline. Relocated from London to Dover. Established 1989. For information ☎ 01304 203 128 or email robroy@catdtp.freeserve.co.uk

To members of the Northants Amiga User Group: Oops, sorry, everybody. I've lost your phone numbers

Continued overleaf ➡

etc. Please contact me again, and any people who would like to join at nsthomas@clara.co.uk also at #Gas on ARCNet Alias BobF

NAC, Nottingham Amiga Club. Users of all ages and abilities welcome. From A500 to A4000 PPCs to 68Ks. Club meetings last Saturday of each month ☎ Mark Sealey 0115 9566485 anytime

Come to #PoweredbyAmiga on ARCNET for informative chat about Amiga's and otherwise! Visit our new URL at www.amigav.free4all.co.uk/PBA/ and be part of THE channel for Y2K!

Norwich Amiga Users Group meets fortnightly Anyone interested, please ☎ 01603 867663

Will all the people who want to help Amiga Users please contact the Amiga Free Helpline? If you need help, please do the same ☎ Terry, 01709 814296

Help needed in setting up new Amiga User Group. All ages welcome, non profit-making, not a business. Northern Ireland area ☎ 01762 331560

French speaking Amiga club. PD disks, help, buy-sell, advice. Also specialists in 8-bit emulation. Please write to: BP 120, 4000 Liege 1, Belgium. No PC!

Why not visit #amIRC on Undernet? #amIRC has established itself as the no.1 Amiga chat channel. We are the offical Amiga help channel on Undernet. Everyone is welcome http://surf.to/amirc

Amiga North Thames meet on the second Sunday of the month at St Mary Magdalene Vestry, Windmill Hill, Enfield, 1-5pm. Software/hardware problem solving, demos, news and Amiga games ☎ Mike 0956 867223 weekends Ant.london@ukonline.co.uk

Amiga Club International members receive a bi-monthly magazine disk and PD programs plus helpline. Recently relocated from London, Falloden Way to Dover. Established 1989 ☎ 01304 203128 or email robroy@catdtp.freeserve.co.uk

Are there any Amiga users in Birmingham who want to set up a user group? ☎ Hitesh 0121 6056452

Is there anybody in the Northamptonshire area interested in starting up a new user group? Please contact me ☎ 01536 724309 or email nsthomas@ukonline.co.uk

Great Yarmouth user group. Anyone interested in joining this user group please contact John ☎ 01493 722422

West Lancs User Group. Sundays, 1pm-4pm at St. Thomas School Hall, Highgate Rd, Upholland ☎ 01695 623865, email ralph@twiss.u-net.com. Help and advice, novices and experts welcome

NPAUG is a new Amiga user group based on the net. We offer a free monthly magazine and tech support over the web. If you are interested in joining, visit our website: http://members.aol.com:/npaug/home.html or email me: npaug@aol.com

Are there any Amiga users in Cornwall interested in starting a user group in the Helston/Falmouth area? If so, email frank@massin.freeserve.co.uk or ☎ 01326 573596 and ask for Frank

Felbrigg Amiga Group meets weekly near Cromer. We are a group for novice and expert users. For more information ☎ 01263 511705 or 824382

Amiga Support Association. We offer help, advice and a friendly chat. Monthly meetings, tutorials and a fact file are all available. To join our mailing list send a mail to Amiga_SA-Subscribe@egroups.com. Contact Phil: Snood@ukonline.co.uk ☎ 01703 464256 or ☎ Paul 01705 787367 for more information or visit http://www.btinternet.com/~philip.stephens

South West Amiga Group, (SWAG) meets every first Thursday of the month, 8:30pm at the Lamb & Flag (Harvesters), Cribbs Causeway, Bristol. SWAG intends to get Amiga users together, provide info and support, promote the Amiga and have a laugh. Contact Andy Mills Swag@wharne.u-net.com

Are you Welsh, live in Wales or love Wales? Then join Cymru Amiga User Group http://bounce.to/caug or email dark.lords@deathsdoor.com to join

Would anyone, anywhere like to join the Amiga Free Helpline? If so see AFCD46:-ReaderStuff-/Terry_Green/ or ☎ Terry 01709 814296 (Rotheram)

Deal Amiga Club welcomes all old hands and newcomers alike, whatever your ability. Admission £1, under 16's 50p. Annual membership is now free. If you've bought some bits and don't know how to put them together then bring them along and let us help ☎ 01304 367992 for more information or email superhighwayman@hotmail.com

New Amiga sound and demo association seeks input, contacts and support to form a user group based around the Amiga music and demo scene. Interested? ☎ Dave 01243 864596 or 0961 985925

Power Amiga User Group based in Portsmouth for users of all ages and levels. We meet once a month on the last Saturday. We have all sorts of Amigas, prize draws, tutorials and general discussions each meeting ☎ Lee 01243 779015 (weekends only) or email LeeScott@free4all.co.uk or visit http://www.poweramiga.freeserve.co.uk

Workbench, the Manchester Amiga user group, meet on the first Thursday of each month at 7.00pm and offer general Amiga chat ☎ 0161 839 8970. Also, check out our website at: http://www.workbench.freeserve.co.uk Or email: mail@workbench.freeserve.co.uk

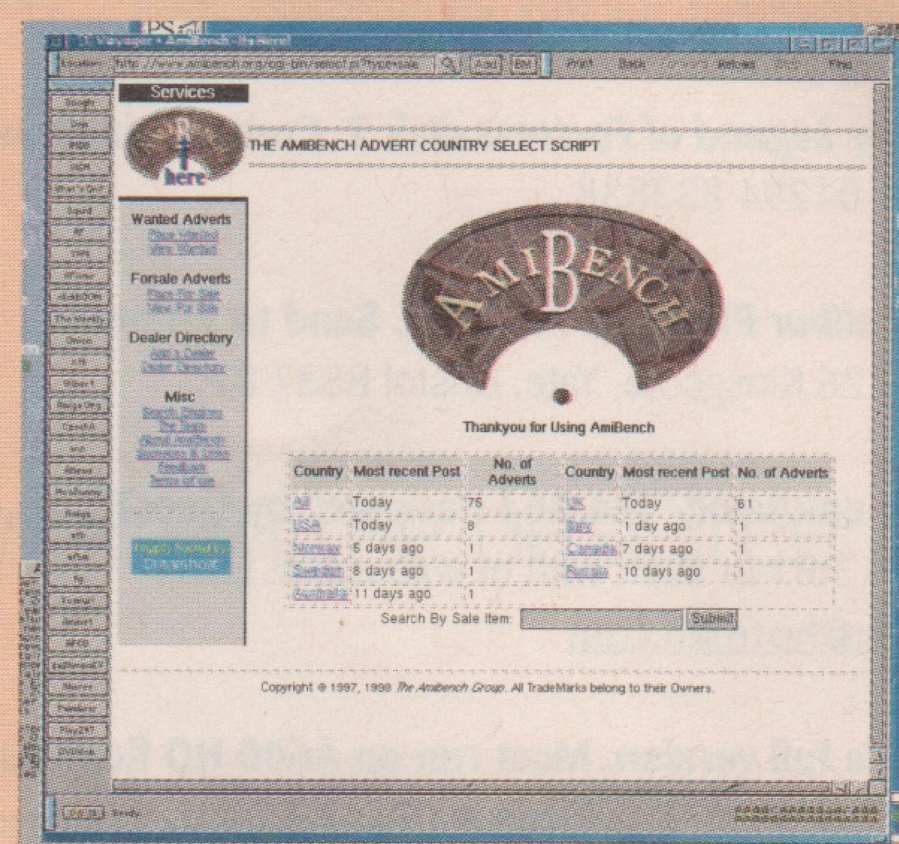
SEAL meets twice monthly at Northlands Park Community Centre, Basildon, Essex. Help, tutorials and presentations plus scanning, printing and email. Contact Mick Sutton, 20 Roding Way, Wickford, Essex. ☎ 01268 761429 (6-9pm) seal@thunder.u-net.com or visit our website, http://seal.amiga.tm

United Amiga/Amstrad user group est. 1986 largest combined nationwide user group for Amiga and 8 bits (Z80/6502). Offering: 40-page magazines, cover discs, scanning/digitizing, technical support, free software, email service, Internet book search, free gift for new members. We are promotors of "Cosmos Fun Class". Send SAE: The Editor, 13 Rodney Close, Rugby CV227HJ or email the_editor@ukonline.co.uk – website: www.uaag@i12.com

YOUR ADVERTISING OPTIONS NOW...

Now that *Amiga Format* is closing, it doesn't mean that all avenues for advertising your user group, wanted ads or items for sale have been closed to you.

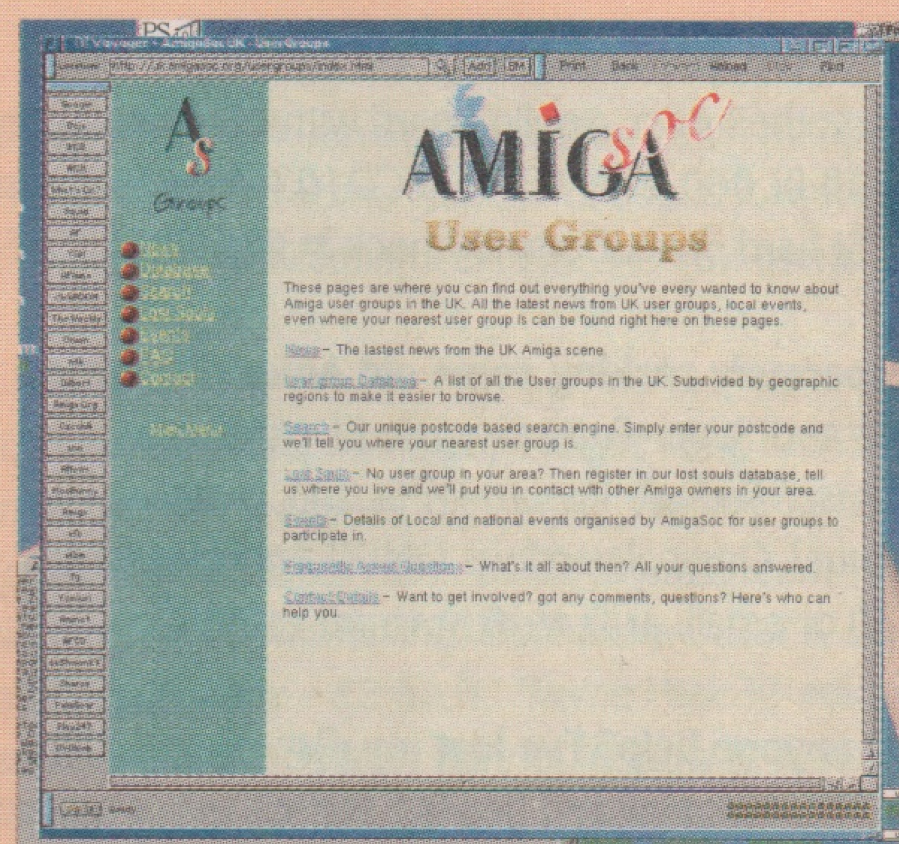
One of the best options for Amiga folk wanting to buy and sell items all over the world is Amibench. Amibench can be found at http://www.amibench.org and is a completely free service.



For those wishing of you to find a local user group in the UK, or to advertise their own, we suggest that you visit the extremely helpful AmigaSoc.

AmigaSoc is a superusergroup reporting to the UGN – User Group Network – responsible for helping user groups worldwide, and do their best to help fledgling usergroups, or long-established ones in this country.

As an Amiga owner, you can use their Lost Souls database to search the country for like-minded users around you in order to set up new usergroups, or simply to find the one nearest you. You can get to their website at http://uk.amigasoc.org



People who would like an up-to-date list of BBSes would do worse than to download Dunkie's CoNnEcTiOnS "magazine" from Aminet. It's available in AmigaGuide and HTML versions and can be found in the docs/lists directory of any Aminet server.

For those that post personal ads, or would generally like to chat, simply the best place on the internet for you would be the afb mailing list. Although it gets a lot of plugging in *Amiga Format* as it is, it really deserves more.

If you just want to put your toe in the water, you can read mails on the web at http://www.egroups.com/group/afb and you can also sign up there.



Kickstart



Chris Livermore takes the commuter train to the suburbs of West London

Way back in the very first *AF* usergroup article I covered the second "Kickstart Sale". When news of a forthcoming third Kickstart Sale reached me a few days ago I decided it was high time I paid Kickstart another visit, this time to a regular club meeting.

Kickstart meetings are held on the last Monday of every month in Ottershaw Village Hall. Ottershaw does a pretty good job of appearing at first glances to be a small village in the middle of nowhere but in actual fact it's only about a mile from Junction 11 of the M25 and a 10 minute Taxi ride from Woking station. Probably the most appealing feature of the Hall though, is its prime location in the village – directly opposite the pub!

Monthly meetings start at 7pm and continue in the Hall until about 10pm. After this, the Amigas are packed away for the night, but the meeting usually continues over the road in the pub until late in the night. The meeting I attended had no real structure to it; members just turned up with their Amigas and did their stuff. Although this is the format used for most meetings, occasionally a Kickstart member will give a talk on a certain subject or a demonstration of a specific piece of software. Most



Kickstart is based in Ottershaw, Surrey.



AF134 (Mar 00) – AF drops in size and becomes saddle stitched after spending its whole life perfect bound. The CD is also put in a cardboard sleeve rather than the jewel case it has always sat in. Gateway sells the Amiga to Amino – a company principally consisting of Fleecy Moss and Bill McEwen. They announce the Tao group as OS partners.

Kickstart meetings attract around 30 people, many of them bringing their machines with them. When I visited there were about eight working machines, and a number of machines in various states of disrepair. Kickstart even have a club A4000 which Chris Green was installing OS3.5 on during the course of the meeting.

Almost all Kickstart members possess expanded machines. There's nothing quite like seeing what a powerful Amiga can do to make you want to own one, and that's exactly what's happened at Kickstart. There are a large number of powerful Amigas available at each meeting demonstrating exactly what is possible with an expanded machine, and also an ever growing number of members who have experience in expanding an Amiga, and so lend confidence to people who have not taken the plunge yet. At this meeting, Kickstart members were attempting, with various degrees of success, to fit an IDE hard drive to an A1200, fit a graphics card to a A4000, and revive a dead A4000, using parts from a working A4000! There were also various pieces of kit changing hands for ludicrously low prices. The same principle holds true for software. As Ray McCarthy explained to me: "It's all very well seeing software reviewed in a magazine or on-line, but the best way to see what it really can do is to site down and use it yourself". Many of the Kickstart members run *Fusion* ("mainly because they can") after seeing it running on other members' machines. After seeing a catalogue of Shania Twain videos playing Full Screen almost perfectly on an 030 machine, I think a number of people will be making *MooVid* their next purchase.

Ray must be prime contender for the member of Kickstart who has most influence over what software other members buy. He has a large collection of application installed on his machine, which he uses to great effect, as a quick glance at the Kickstart website will tell you. He has also managed to configure his Workbench in such as way that just one glance will make you want it on your machine. Unfortunately for me, he also seems to have something else installed that means his machine crashes the minute I go near it (three times in as many minutes – I don't know what I was doing wrong, but it worked fine for everyone else). Ray gave me some demos of *Candy Factory, Draw Studio* and *Photogenics* and made them look fantastic, which of course they are. He also made it look like child's play to produce top quality work with them, which,



Sharing software and hardware expertise.

if you've seen my sad efforts, you'll know is not always the case.

As I mentioned earlier, Kickstart are planning their 3rd Kickstart Sale. This is a sort of mini World Of Amiga show. As well as commercial Amiga dealers, clubs and individuals take stalls selling second hand hardware and software. There will be games competitions, demos and representatives from Kickstart and other usergroups. The date has yet to be confirmed, but it looks set for sometime in May. Kickstart sales are a great opportunity to pick up bargains and meet with some of the Amiga dealers and UK usergroups whilst avoiding the frenzied atmosphere of WOA.

Chris Livermore

CONTACT DETAILS

Web Site: http://kickstart.amiga.tm
Contact Chris Green: editor@amigainsight.com, **or just turn up 7PM, last monday of each month.**



"Here's one I took apart earlier."



Kickstart meets at the Village Hall and then goes over the road to the pub.

Sabrina
Web designer



Just the FAQs

Like all things *Amiga Format*, Sabrina's run has come to its end. So where did it all begin?

Regular readers will have come to know Sabrina well by now – she has appeared regularly in *Amiga Format*'s Mailbag section since *AF100*. However, she's always been a bit of a recluse, so we were very happy to finally catch up with her in order to interview her for our Just the FAQs page:

■ When did you first use an Amiga?

I think it must have been about 1990 or 1991. I was always interested in computer graphics, and the Amiga had that reputation. There was a computer store near where I lived, and I visited there often and checked out the 500s and 2000s they had. I asked my parents to help me buy one, but they were only interested in something "PC-compatible", even though I don't think they understood exactly what the words meant.

I had to wait until a couple years later, when I left for college and had scraped together a little money for myself to buy one. Luckily, the Amiga 1200s were available by then. I still use that 1200 today, and my folks still don't understand why.

■ When did you decide to get involved in the Amiga market on a business level?

I needed a job. Well, after I graduated from art college, I was trying to get work in graphics or the Internet, but It's not easy to find work as an Amiga user. Most people give you a blank look and then ask if I know how to use *Photoshop* or *Corel Draw* or something. I was lucky to find a job in web graphics. Thankfully, there weren't many qualified applicants.

■ What are you working on now?

Right now, I'm working at Double-Z studio, an – uh – ahem – "adult entertainment" studio. I work on the basic design and graphics work for their website. It's kind of a stressful place to work, because of all the things going on, and Zig Zag, my boss and the owner of the studio, doesn't help me relax any. I would quit, but the pay is good enough for me to tolerate, at least for a while. Don't tell anyone, but I actually enjoy a lot of the graphic and HTML work I get to do. I still ashamed at most of the photographs I have to scan and post to the site, however.

■ What's the one Amiga peripheral (software or hardware) that you wouldn't be without?

That's not fair! I don't want to pick just one. I guess the one that's freshest in my mind right now is the Blizzard 68060 and PowerPC combo accelerator in my 1200. I don't have much software that uses the PowerPC chip yet, but the 68060 is invaluable, especially when I'm working on 24-bit graphics or browsing the web.

Oh, I really like Amiga OS 3.5 too. Can I include that?

■ Who is your Amiga hero and why?

I was originally thinking of Eric Schwartz. I can kind of identify with him, because we are both diehard Amiga users with no other computers right now. However, he hasn't really done anything for me lately, so I won't bother.

■ What's the one piece of software or hardware you wish you'd had the idea for?

I wish I had come up with *Photogenics*. I can't think of any better graphics software for artist types. I really like to use it. Unfortunately, I'm rather limited because I just have the 1200, with no graphic card yet. I really want to get a Bvision card to add on to the Blizzard, but they are next to impossible to find, at least here in the United States. If anyone wants to give me one, I'll be a very happy skunk.

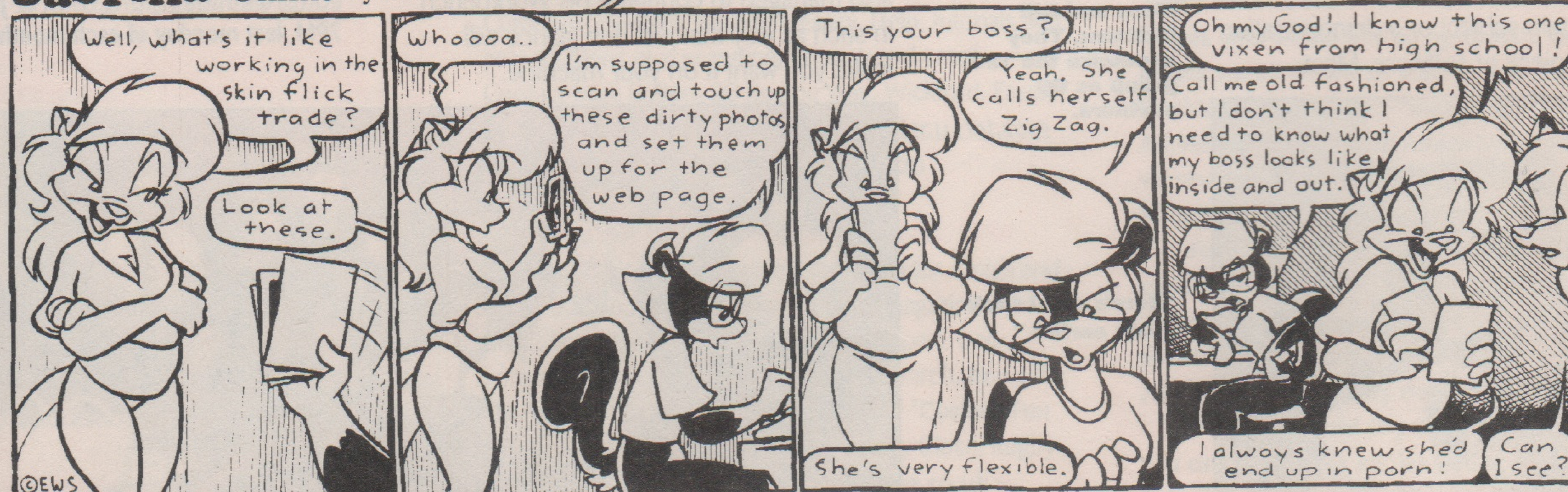
■ What are your plans for the future?

I don't really know. I'll probably keep working at the studio until I've made enough money for a huge upgrade to my Amiga, like an A4000 Tower with all the trimmings. I don't have any plans to get a Windows PC or anything like that. I've tried them, and I prefer the Amiga so much more, so I'll use it until it can't provide something I need.

■ Thank you for your time.

Thanks. It was neat to talk with a major Amiga magazine like *Amiga Format*. I hope I didn't bore you too much.

Sabrina Online by Eric W. Schwartz ©1999 "Week one: Tuesday"



Catch up with Sabrina's continuing adventures at www.coax.net/people/erics/

afb amiga format bulletin

afb will not die. At the time of going to press, the mailing list went out to 937 people. It will continue to do so…

Members of the afb were told prior to anyone else knowing that AF was to close. As such, they sent messages of condolences to us which we decided to reprint here. afb will carry on regardless of AF closing down, so make sure you join up today to get the news first.

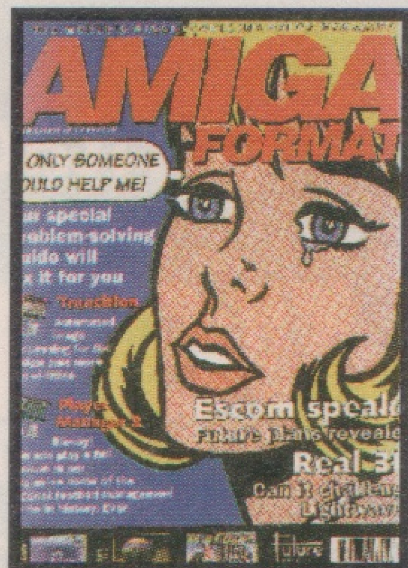
"Y'know I've been writing a game for *AF* since August '98. I guess I should have worked faster, as now there'll be no Reader Games to send it to. I'll think of something. But right now I'm too sad. Sniff. Thanks *AF* – it's been great."
George Davis

"Just when everything seems like it might be getting back on track, this happens. But I suppose there's nothing anyone can do about it. As you said, you're not yet sure whether Amiga will succeed, and I don't think many of us are sure yet – understandably. Still, it would be brilliant if it did, and *AF* was revived... Ben and Rich, thanks for everything you've done with *AF*. Greatly appreciated."
Neil Bullock

"For they are jolly good fellows; for they are jolly good fellows – for they are jolly good fe-hel-lows! And so say all of us!" I won't say hip-hip-hooray because it isn't a cause to celebrate. I'm sorry to see a great magazine end but here's hoping Future will re-start it once the Amiga regains the limelight."
Samuel Byford (Bifford the Youngest)

"I'm really sorry to hear *AF* has folded - I've been a die-hard since *ST-Amiga Format* and I can honestly say it's been at its best with you as "the Man". There's nowt much else to say – I'll catch up with you on the list..."
Rob Marris

"Just a quick note to say goodbye and good luck to you, and everyone who has recently been involved in *Amiga Format*. This is a sad day for the Amiga community. I will miss the mag immensely."
Steve Eaborn



AF74 (Aug 95) – Escom's version of the 4000T is unveiled in Frankfurt. New UK TV channel Channel 5 is expected to interfere with Amiga modulators.



AF128 (Oct 99) – The plans and a model of the MCC are shown at the WoA show in London. Ben Vost wins the AAA UK award. Evil Rich is born. AF starts its well-favoured Complete Beginner's Guide series.

"Good to hear that you're not being dropped into the gutter. Thanks for everything you and Rich have done for us on afb, in the mag, and with the Amiga world in general. I only wish this was all a bad dream and that I will wake up but I'm certain that's how your whole life has been the past few weeks!"
Kevin Fairhurst

"SH*T there goes the neighbourhood"
Lewis (quietly depressed) Brunton

"It certainly is a sad day to see another Amiga magazine close, especially when its a magazine I've grown up with. All the best to you and the *AF* team."
David Steele

"Just read your post, I am sorry to read the end of such a fine magazine. *Amiga Format* was the last great bastion of the Amiga, certainly here in the UK."
Mikey Carillo

"I just wish to say thank you for such an excellent magazine over the years with such good and useful information and I am sorry to see you go. In bocca al lupo!"
Flavio Antonietti

"I for one would like to thank you and the rest of your team for all the effort you have put into keeping *AF* going as a quality magazine that people really look forward to reading. I will really miss the pleasant thud of *AF* coming through the letter box every month."
Chris Green

"Over the years, *AF* has changed from being one of Future's leading magazines in any field to a flimsy article with a low circulation. From a high point of 308 pages (*AF30*, I think) to a stapled format.

But one thing that's certain is that the last couple of years have been of a higher quality than any other point in the magazine's history, and far above the majority of magazines published today.

I think you should be proud of what you've managed to accomplish against the odds, although it's still a mystery to me as to why it seems to be the magazines with the smallest circulations that seem to achieve the most. But anyway, thank you for everything you've put into *AF*.

I'm glad that you're going out as a high quality publication that people are going to miss rather than the sort of tatty rag most magazines end up as before dying.

We'll miss you."
Matthew Garrett

RULES AND REGS:

Based on the fact that people complain about a lack of regulation on the list, we've decided to introduce some hard and fast rules. Expect these to change as time goes by, although some will stay fixed:

- **All polls must have dates. For an example of this, look at existing polls before starting one of your own. Also, unless absolutely necessary, choose a closed or anonymous poll – the named one takes up far too much space.**
- **Make sure you quote sensibly, don't include the greeting or signature from the previous mail, etc.**
- **Please pay attention to and keep all mails with MANAGE at the start of the subject line.**
- **Keep the subject live. Make sure that it applies to the mail you are sending, or change it to something more appropriate.**
- **There are no content restrictions on afb, although swearing is frowned upon, but please don't include attachments unless previously agreed.**
- **Any URLs posted should have the "http://" part to enable people to simply double-click on them to launch their browsers.**

"I think I speak for everyone on afb (and its associated lists) when I say: "Thank you for years of the best magazine I've ever read, and I hope that the other Amiga mag(s) out there keep the flame burning long and hard." Amiga/Amino (whatever you're calling yourself these days), I hope you're taking note.

The market is dying, wilting. We need SOMETHING to bring the Amiga back into focus, into the limelight. It's hard to "keep the momentum" when one of the longest running Amiga Magazines is closing."
Robert Johnston

"Since 1988, you have provided me one of the best magazines ever, from the days of *ST/Amiga Format* to this very day. I never missed an issue, and I am just gutted that Future have decided to shut *AF* just when things were looking up.

What can I say apart from thank you everybody. It's been a lot of fun, and now it's even more serious.

Just thank you for sticking with us during the very bad times."
Nick Lamburn

GETTING ON AFB:

You can subscribe to the afb by going to the following website and signing up:
http://www.egroups.com/group/afb/

If you just want news on when the next issue of *Amiga Format* will be out, we offer that at:
http://www.egroups.com/group/afb-announce/

It's worth joining both lists since they each offer unique things and the announce list usually only has one email every four weeks.



We'll meet again, don't know where, don't know when...

Right, now let's get down the pub!

AF 136 – MAY 2000

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If you have a feature idea, a review, a reader request, or you want to be in the Amiga Angels list, we're really sorry, but I'm afraid that you've missed your chance for a place in the sun inside *Amiga Format*. If you don't have email, then a letter to the *AF* address with those headings is also fine, but probably won't get read, I'm afraid, owing to there being no-one left to read it.

If you want to speak to us about a technical problem, you should get on the afb mailing list where there are nearly a thousand people prepared to help.

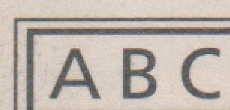
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Media with Passion

Bath **London** Milan **Munich** New York
Paris San Francisco



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Right, now that's finally over, mine's a Guinness. What are you having Rich? Mark? Paul? Jon? A Babycham?! Anyone want anything to eat? Naaaah, let's just get on with the drinking. You lot still here? Go home, there's no more to see. Really. Byeee...

This month's Special Offer Bundles from Eyetech

As we carry over 500 Amiga lines in stock at any one time it is impossible to list everything here. If you would like to receive a comprehensive Amiga Products & Accessories Price Index, including our latest specials, please send a large S.A.E (UK:39p), or visit our website at www.eyetech.co.uk/MAIN/AINDEX

SCANQUIX 5 IS NOW AVAILABLE



We now have ScanQuix v5 in stock - the latest version of the best scanning software available for WB 3.0+ Amigas.

ScanQuix v5 is available in CDROM-format only and adds greatly to the functionality of SQ4. New features include:

- New image loading and saving algorithms with thumbnail icon generation
- Automatic image dithering where the number of screen colours is less than the number of image colours
- Optional 'smart selection' of image scan area from the preview screen - scanquix automatically recognises the image from the background and sizes the initial selection box accordingly
- All available scanner drivers are now supplied with Scanquix 5 - including SCSI, parallel and serial modes - for popular scanners from Epson, Mustek, Artek, Canon and Umax (but please check model compatibility with Eyetech before buying your scanner!) Previous versions required a specific scanner to be specified when ordering.
- ICS colour correction system for automatic colour correction/colour matching of your scans to your printers output (Turboprint 7 required)
- PPC/Warp Up accelerator support built-in with automatic optimisation of most time-critical routines to suit the accelerator being used
- Image rotation & mirroring and contrast, brightness & gamma correction are now possible during scanning as well as afterwards.
- Includes additional programs for scanning to disk, colour and greyscale 'photocopying' (needs turboprint 7) and the FXScan image manipulation and file conversion program by Felix Schwartz

The minimum requirements for Scanquix5 are - WB3.0, 6mb, '020 or better. ScanQuix 5 costs £59.95, upgrades from SQ4 are also in stock at £34.95.

NETWORKING HARDWARE & SOFTWARE

Ethernet high-speed networking for professional applications & gaming. All cards come complete with NET-FS software (for Amiga-Amiga networking) and SAMBA (for Amiga/PC networking)

NEW! The SURF-XS multi-functional Zorro ethernet and I/O expansion card

The **Surf-XS** is an all-new high performance card for all Zorro-based Amigas, including the A2000/A3000/A4000s and Amiga 1200s with the Z4 or other expansion boards. As standard the card comes with:

- 10Mbps ethernet adapter, with both BNC and UTP (twisted pair) connectors and SANA II compatible drivers.
- 2 clockports, suitable for adding one or two Silver Surfer or PortPlus/PortJnr high speed serial/parallel cards, a clockport-fitting Catweasel high density floppy controller etc.
- 2 x IDE ports allowing up to 4 additional (non-bootable) hard drives/ CDROMs/ CDWriters (needs IDEFix 2000 - available separately)
- 26-pin extension port for GoldSurfer/Hypercom3ex high-speed, 2 x serial/1 x parallel expansion card.

And the price for all this functionality? - an unbelievable £79.95.

Surf-XS + PC PCI e'net card + 3m UTP cable - £99.95
Surf-XS + PortJunior MK 2 460K bps serial - £99.95
Surf-XS + PortPlus XS 2 x hi-speed serial & hi-speed parallel expansion - £119.95
PortPlus XS 2x460kbd ser + 1x par i/f alone - £49.95

PCMCIA ethernet card (UTP) with Amiga SANA II and PC drivers - £44.95
2 x PCMCIA ethernet cards and drivers with 3m twisted UTP cable - £89.95
1 x PCMCIA ethernet card plus 1 x PC PCI card and 3m UTP cable - £69.95
Envoy Amiga-to-Amiga professional networking software (2-user) - £39.95
Siamese RTG2.5 Amiga-to-PC client/server networking software (needs Amiga TCP/IP stack - included in OS 3.5 software & internet software) - £69.95

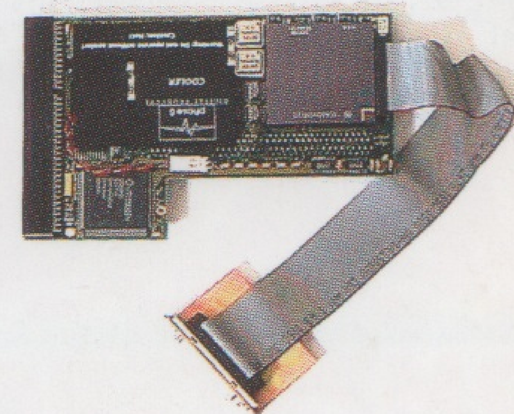
All A1200 PCMCIA ethernet cards need the CC_RESET fix carried out to ensure reliable operation - just £20 within 30 days of a PCMCIA ethernet card purchase (normally £30)

SERIAL NETWORKING - for occasional Amiga-Amiga & Amiga-PC file transfer

Null Modem cable 2m alone - £9.95
10m - comes with TwinExpress PD Amiga/ Amiga & Amiga/PC networking software - £19.95
Siamese RTG 2.1 serial Amiga-to-PC client/server networking software - £19.95

PARALLEL PORT NETWORKING - for 2 Amigas
Parallel cable for Parnet/Parbench networking software (which is included) - £19.95

BLIZZARD PPC BOARDS BACK SOON



DCE - one of Eyetech's German partners - have agreed to put phase 5's PowerPC 680x0 + 603 boards back into production. Components have already been ordered with the new boards expected to be in production after Easter this year. Initially at least, production will be limited to the entry-level 160Mhz 603 PPC with 68040/25 (both with and without fast SCSI-2 interface) and the top-of-the-range 240MHz 603 PPC with 68060/50MHz with SCSI. This latter board will also be available without the 68060 cpu for those wishing to upgrade from high-end non-PPC 68060 accelerators.

There will be specially priced PPC & BVision bundles for customers ordering in advance.

Demand is expected to be high so customers are advised to place an advanced order now to avoid disappointment later. We do not deduct funds or bank cheques before goods are available for shipping and, if you change your mind before shipment, we don't make any cancellation charges either.

We will also be shipping the first batch of the new DCE production of BVision high performance graphics cards for these Blizzard PPC accelerators by the time this issue hits the streets, so if you are thinking of ordering a PPC card - don't forget your BVision as well! The 8MB BVision card is the best graphics card available for any Amiga, supporting resolutions of up to 1600x1280 in 24 bit colour at 72Hz refresh rates.

TURBOPRINT 7.1 NOW IN STOCK



We now have the latest update to Turboprint in stock - v7.10, both for new customers and for those wishing to upgrade from version 7.0x.

Although not a major functional update to the program itself, version 7.1 fixes all known bugs in v7.0x and adds support for several new printers from Epson, Canon, and HP. In particular 'photo cartridges' are supported on many of the printers for which they are available (eg the BJC 7100).

The new drivers supplied include those for:
Canon BJC1000, 2000, 4400, 6000, 6100, 7100
Epson Stylus Colour 460, 660, 760, 860, 900
Epson Stylus Photo 750, 1200
HP Deskjet 810, 812, 815, 830, 832, 882

Turboprint full version remains at £38.95, with upgrades from v.7.0x just £14.95. Upgrades from V6.x are also available

NETWORKING MADE EASY

Networking Amigas to each other and PC's has always been possible - but never been easy for the layman to install - with the exception of the Siamese RTG2.5 package. Eyetech has now changed all that.

All our ethernet networking products - from the PCMCIA ethernet card for the Amiga at £44.95 to the top of the range Surf-XS card (see below left) - now come complete with Samba and NET-FS networking software distributions free of charge, and simple installation procedure for working with either Miami or Netconnect/Genesis TCP/IP software (one of which must be preinstalled on each Amiga to be networked).

The exclusive Eyetech installer installs ethernet card device drivers and client/server software suites in just five mouse clicks, allowing you to choose which software package to use after installation by simply clicking on the appropriate icon.

For those who have already bought the necessary hardware, the software CD is available on its own for just £14.95.

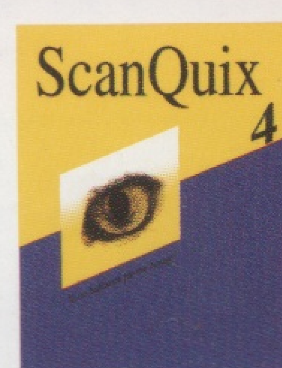
NETCONNECT - STFAX - INTERNET

- Dynalink 56Kbd voice/data/fax modem
- Award-winning NetConnect-3 Internet software
- Free Internet access (0845 lo-call charges only) **Just £99.95**

Time-of-Purchase Options

- ISDN Home Highway terminal adapter (instead of modem) - add **£30**
- PortJunior MK2 - high speed serial port - A1200 clock port - add **£20**
- PortPlus MK2 (2 x high speed serial + 1 x hi-speed parallel) for A1200 clock port - add **£50**
- Hypercom 3i+ (2 x high-speed serial + 1 x hi-speed parallel) for Zorro Amigas - add **£40**
- Hypercom 4i+ (4 x high-speed serial plus 2 x hi-speed parallel) for Zorro Amigas - add **£60**
- STFax-4 Amiga fax & voice mail software - add **£30**

PARALLEL PORT SCANNER BUNDLE



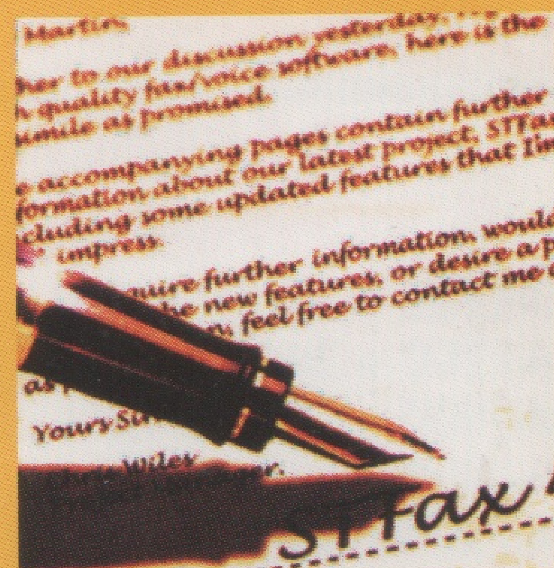
- Mustek 600 CP A4 Flatbed Scanner for EPP parallel port
- IOBLIX Hi-speed parallel EPP port (required) for the A1200 (fits on clock port)
- ScanQuix award-winning Amiga software, PC & MAC scanner software
- 25D-M to 25D-M scanner cable

No other interfaces needed - just £149.95

LAST FEW UMAX SCSI SCANNER BUNDLES AVAILABLE INCLUDING ARTEFFECT 1.5SE & PHOTOSCOPE AMIGA SCANNING SOFTWARE - JUST £149.95



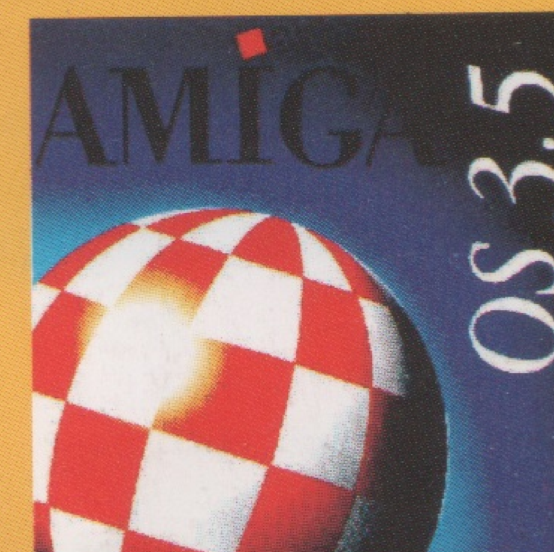
NetConnect 3 - £49.95
Upgrades - £34.95



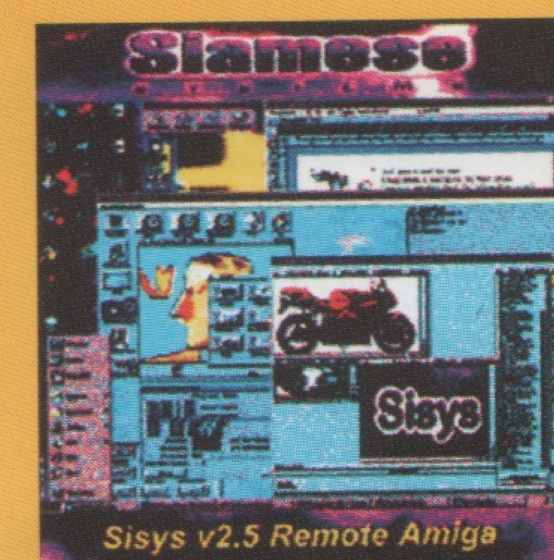
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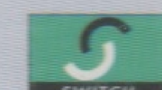
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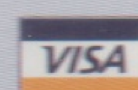
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